MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT
OCEAN DUMPING PERMIT

PERMIT NUMBER AND TYPE: OD 90-01 Special

EFFECTIVE DATE: July 31, 1990

EXPIRATION DATE: July 30, 1993

PERMITTEE: StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

WASTE GENERATOR: StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

WASTE GENERATED AT: StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

PORT OF DEPARTURE: Pago Pago Harbor, American Samoa

WASTE TRANSPORTER: Pago Marine, Inc.
MV ASTRO
Pago Pago, American Samoa

A special ocean dumping permit is being issued to StarKist Samoa, Inc. because the Regional Administrator of EPA Region 9 has determined that disposal of fish processing wastes off American Samoa meets EPA's ocean dumping criteria at 40 C.F.R. Parts 227 and 228. This special permit authorizes the transportation and dumping into ocean waters of fish processing wastes as described in the special conditions section pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 (33 U.S.C. § 1401 et seq.) as amended (hereinafter referred to as "the Act"); regulations issued thereunder; and the terms and conditions set forth below.

This MPRSA Special Permit does not contain any information collection requirements subject to Office of Management and Budget review under the Paper Work Reduction Act of 1980, 44 U.S.C. § 3501 et seq. This determination has been made because the permit does not require data collection by more than 10 persons.

1. GENERAL CONDITIONS

1.1. Operation under this special ocean dumping permit shall conform to all applicable federal statutes and regulations including, but not limited to, the Act, the Ocean Dumping Ban Act of 1988 (PL 100-688), the Marine Plastic Pollution Research and Control Act of 1987 (PL 100-220), the Clean Water Act (33 U.S.C. § 1251 et seq.), and the Ports and Waterways Safety Act (33 U.S.C. § 1221 et seq.)

1.2. All transportation and dumping authorized herein shall be undertaken in a manner consistent with the terms and conditions of this permit. StarKist Samoa, Inc. (hereafter referred to as "the permittee") shall be liable for compliance with all such terms and conditions. The permittee shall be held liable under § 105 of the Act (33 U.S.C. § 1415) in the event of any violation of the permit. During disposal operations when the permittee's wastes are combined with similar wastes from other permittees authorized to used the ocean disposal site defined in Special Condition 2.2, all companies shall be held individually liable under § 105 of the Act (33 U.S.C. § 1415) in the event of any violation of the permit.

1.3. Under § 105 of the Act, any person who violates any provision of the Act, 40 C.F.R. Parts 220 through 228 promulgated thereunder, or any term or condition of this permit shall be liable for a civil penalty of not more than $50,000 per day for each violation. Additionally, any knowing violation of the Act, 40 C.F.R. Parts 220 through 228, or the permit may result in a criminal action being brought with penalties of not more than $50,000 or one year in prison, or both. Violations of the Act or the terms and conditions of this permit include but are not limited to:

1.3.1. Transportation to, and dumping at any location other than that defined in Special Condition 2.2 of this permit;

1.3.2. Transportation and dumping of any material not identified in this permit, more frequently than authorized in this permit, or in excess of those quantities identified in this permit, unless specifically authorized by a written modification hereto;

1.3.3. Failure to conduct permit monitoring as required in Special Conditions 3.1, 3.3.1, 4.7 and 5.1; or

1.3.4. Failure to file waste stream and disposal site monitoring reports as required in Special Conditions 3.3, 4.7, 5.2 and 5.3.

1.4. Nothing contained herein shall be deemed to authorize, in any way, the transportation from the United States for the purpose of dumping into the ocean waters, the territorial sea, or the contiguous zone, the following materials:

1.4.1. High-level radioactive wastes;

1.4.2. Materials, in whatever form, produced for radiological, chemical, or biological warfare;

1.4.3. Persistent synthetic or natural materials which may float or remain in suspension in the ocean; or

1.4.4. Medical wastes as defined in § 3(k) of the Act.

1.4.5. Flotables, garbage, domestic trash, waste chemicals, solid waste, or any materials prohibited by the Ocean Dumping Ban Act or the Marine Plastic Pollution Research and Control Act.

1.5. Nothing contained herein shall be deemed to authorize, in any way, violation of applicable American Samoa Water Quality Standards.

1.6. After notice and opportunity for a hearing, this permit may be revised, revoked or limited, in whole or in part, subject only to the provisions of 40 C.F.R. §§ 222.3(b) through 222.3(h) and 40 C.F.R. § 223.2, as a result of a determination by the Regional Administrator of EPA that:

1.6.1. The cumulative impact of the permittee's dumping activities or the aggregate impact of all dumping activities in the dump site designated in Special Condition 2.2 should be categorized as Impact Category I, as defined in 40 C.F.R. § 228.10(c)(1);

1.6.2. There has been a change in circumstances relating to the management of the disposal site designated in Special Condition 2.2;

1.6.3. The dumping authorized by the permit would violate applicable American Samoa Water Quality Standards;

1.6.4. The dumping authorized can no longer be carried out consistent with the criteria set forth in 40 C.F.R. Parts 227 and 228;

1.6.5. The permittee violated any term or condition of the permit;

1.6.6. The permittee misrepresented, or failed to accurately disclose all relevant facts in the permit application; or

1.6.7. The permittee failed to keep records, engage in monitoring and reporting activities, or to notify appropriate officials in a timely manner of the transportation and dumping activities as specified in any condition of this permit.

1.7. The permittee shall ensure at all times that facilities, including any vessels associated with the permit, are in good working order to achieve compliance with the terms and conditions of this permit. During all transportation and loading operations, there shall not be a loss of fish processing wastes to any waterway or during transport to the disposal site.

1.8. Any change in the designated waste transporter may be made at the discretion of the Regional Administrator or his delegate, provided that a written request for such a transfer be made by the permittee at least thirty (30) days prior to the requested transfer date.

1.9. The permittee shall allow the Regional Administrator of EPA Region 9, the Commander of the Fourteenth U.S. Coast Guard District (USCG), the Director of the American Samoa Environmental Protection Agency (ASEPA), and/or their authorized representatives:

1.9.1. To enter into, upon, or through the permittee's premises, vessels, or other premises or vessels under the control of the permittee, where, or in which, a source of material to be dumped is located or in which any records are required to be kept under the terms and conditions of this permit or the Act;

1.9.2. To have access to and copy any records required to be kept under the terms and conditions of this permit or the Act;

1.9.3. To inspect any dumping equipment, navigational equipment, monitoring equipment or monitoring methods required in this permit;

1.9.4. To sample or require that a sample be drawn, under EPA, USCG, or ASEPA supervision, of any materials discharged or to be discharged; or

1.9.5. To inspect laboratory facilities, data, and quality control records required for compliance with any condition of this permit.

1.10. Material which is regulated by this permit may be disposed of, due to an emergency, to safeguard life at sea in locations or in a manner that does not comply with the terms of this permit. If this occurs, the permittee shall make a full report, in accordance with the provisions of 18 U.S.C. § 1001, within 15 days to the EPA Regional Administrator, the USCG and the ASEPA describing the conditions of this emergency and the actions taken, including the nature and amount of material disposed.

1.11. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property

or any invasion of rights, nor any infringement of Federal, State or local laws or regulations, nor does it obviate the necessity of obtaining State or local assent required by applicable law for the activity authorized.

1.12. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities, or, except as authorized by this permit, the undertaking of any work in any navigable waters.

1.13. Unless otherwise provided for herein, all terms used in this permit shall have the meanings assigned to them by the Act or 40 C.F.R. Parts 220 through 228, issued thereunder.

2. SPECIAL CONDITIONS - DISPOSAL SITE AND WASTE CHARACTERIZATION

These conditions are required to define the length of the permit period, identify the disposal site location, describe the waste materials and define maximum permitted limits for each waste material.

2.1. Location of the Waste Generator and Duration of the Permit

2.1.1. The material to be dumped shall consist of fish processing wastes, defined in Special Conditions 2.3 and 2.4, which are materials generated at the permittee's fish cannery in Pago Pago, American Samoa.

2.1.2. This permit shall become effective on July 31, 1990 and it shall expire three years from the effective data at midnight on July 30, 1993.

2.2. Location of Disposal Site

Disposal of fish processing wastes generated at the location defined in Special Condition 2.1.1 shall be confined to a circular area with a 1.5 nautical mile radius, centered at 14° 24.00' South latitude by 170° 38.30' West longitude.

2.3. Description of Fish Processing Wastes

2.3.1. During the term of this permit, and in accordance with all other terms and conditions of this permit, the permittee is authorized to transport for disposal into ocean waters quantities of fish processing wastes that shall not exceed the following amounts:

Fish Processing Wastes	Amount
Dissolved Air Flotation (DAF) Sludge	60,000 gallons/day
Precooker Water	100,000 gallons/day
Press Water	40,000 gallons/day
Total Maximum Daily Volume	200,000 gallons/day

2.4. Waste Material Limitations

2.4.1. Permitted Physical and Chemical Constituents

Fish Processing Waste	Total Permitted Daily Volume To Be Dumped	Permitted Maximum Concentration Per Constituent[a]	
DAF Sludge[b]	60,000 gal/day	Total Solids	230,460 mg/L
		BOD_5	376,520 mg/L
		Total Phosphorus	3,050 mg/L
		Total Nitrogen	18,100 mg/L
		Oil and Grease	129,590 mg/L
		Tot. Vol. Solids	182,210 mg/L
		Density[c]	0.92 to 1.07 g/ml
		Ammonia	7,500 mg/L
Precooker Water[b]	100,000 gal/day	Total Solids	158,290 mg/L
		BOD_5	365,450 mg/L
		Total Phosphorus	1,150 mg/L
		Total Nitrogen	21,380 mg/L
		Oil and Grease	4,830 mg/L
		Tot. Vol. Solids	146,900 mg/L
		Density[c]	0.97 to 1.06 g/ml
		Ammonia	21,200 mg/L
Press Water[b]	40,000 gal/day	Total Solids	271,920 mg/L
		BOD_5	399,090 mg/L
		Total Phosphorus	1,990 mg/L
		Total Nitrogen	31,550 mg/L
		Oil and Grease	62,150 mg/L
		Tot. Vol. Solids	385,630 mg/L
		Density[c]	0.96 to 1.07 g/ml
		Ammonia	21,170 mg/L

a = All calculated values were rounded to the nearest 10, except the density range.

b = Gamma = 0.95, P = 0.95 (see Special Condition 2.4.2)

c = Density ranges were calculated based on two standard deviations from the average of research permit data adjusted for outliers.

StarKist Samoa

2.4.2. Permitted Maximum Concentrations for each type of waste were calculated based on an analysis of historical data from the permittee's previous research permits. The calculations followed EPA's recommended procedure for determining permit limits as defined in the EPA document titled "Guidance Document for Ocean Dumping Permit Writers" (January 30, 1988). EPA will periodically review these limits during the permit to evaluate the accuracy of the limits. If revisions are necessary, EPA will make changes according to the authority defined in the Ocean Dumping Regulations at 40 C.F.R §§ 223.2 to 223.5.

2.4.3. The pH range for all fish processing wastes shall not be less than 5.5 pH units nor greater than 7.0 pH units.

2.4.4. The Permitted Maximum Concentration and pH limits, listed above, shall not be exceeded at any time during the term of this permit.

3. SPECIAL CONDITIONS - ANALYSIS OF WASTE MATERIAL

Compliance with the permitted maximum concentrations defined in Special Condition 2.4 shall be determined by monthly monitoring of each of the waste streams permitted for ocean disposal. Additional analyses of fish processing wastes and reporting requirements are defined in this section. Any sampling dates shall be scheduled within the first two weeks of the month to allow enough time for laboratory analyses and report writing to comply with Special Condition 3.3.

3.1. Analyses of Waste Material

3.1.1. Concentrations of the constituents listed in Special Condition 2.4 and those listed in the table below shall be determined for each waste stream. A sample of each waste stream shall be taken before the individual streams are mixed prior to being pumped into the disposal vessel. A sample shall consist of three replicate samples, taken on the day that sampling is scheduled, which are pooled to be used as a composite sample. The detection limits specified in the table shall be used in all waste stream analyses.

Parameters	Detection Limits	
Total Solids[a]	10.0	mg/L
BOD_5	10.0	mg/L
Total Phosphorus	1.0	mg/L
Total Nitrogen	1.0	mg/L
Oil and Grease	10.0	mg/L
pH	0.1	pH units
Total Volatile Solids	10.0	mg/L

Parameters (cont.)	Detection Limits
Density	0.01 g/mL
Ammonia	1.0 mg/L
Aluminum	0.01 mg/L
Chromium	0.01 mg/L
Nickel	0.01 mg/L
Copper	0.01 mg/L
Lead	0.01 mg/L
Cadmium	0.01 mg/L
Mercury	0.01 mg/L
Total Petroleum Hydrocarbons[b]	0.05 mg/L

a = Limits for Total Solids will be calculated when enough data are available.

b = Infrared Spectrophotometry, EPA Method 418.1

3.1.2. All waste material sampling procedures, analytical protocols, and quality control/quality assurance procedures shall be performed in accordance with guidelines specified by EPA Region 9. The following references shall be used by the permittee:

3.1.2.1. 40 C.F.R. Part 136, EPA Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act;

3.1.2.2. Tetra Tech, Incorporated 1985. Summary of U.S. EPA-approved Methods, Standard Methods and Other Guidance for 301(h) Monitoring Variables. Final program document prepared for the Marine Operations Division, Office of Marine and Estuarine Protection, U.S. Environmental Protection Agency. EPA Contract No. 68-01-693. Tetra Tech, Incorporated, Bellevue, Wa.; and

3.1.2.3. Environmental Protection Agency. 1987. Quality Assurance and Quality Control for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods. Office of Marine and Estuarine Protection, Washington, D.C. EPA 430/9-86-004.

3.1.3. Any waste material constituents listed in Special Condition 3.1.1 that are shown to be consistently nondetectable, may be eliminated from further analytical tests. Before elimination of the parameter is permitted, the permittee shall obtain written approval from EPA Region 9 and the ASEPA.

3.2. Analytical Laboratory

3.2.1. Within 30 days of the effective date of this permit, the name and address of the contract laboratory or laboratories and a description of all analytical test procedures and quality assurance/quality control procedures, including detection limits being used, shall be provided for EPA Region 9 approval.

3.2.2. Any potential variation or change in the designated laboratory or analytical procedures shall be reported, in writing, for EPA Region 9 approval.

3.2.3. EPA Region 9 may require analyses of quality control samples by any laboratories employed for purposes of compliance with Special Condition 3.1 and Appendix A. Upon request, the permittee shall provide EPA Region 9 with the analytical results from such samples.

3.2.4. A complete analysis of constituents, required in Special Condition 3.1, shall be made by the permittee and reported to EPA Region 9 and the ASEPA whenever there is a change in the quality of the waste, process configuration, or waste treatment. If deemed necessary by EPA Region 9, bioassays shall be required in addition to constituent analyses.

3.3. Reporting

3.3.1. The permittee shall provide EPA Region 9, ASEPA, the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS) and the Western Pacific Regional Fishery Management Council (WPRFMC) with a report, prepared every 6 months during the permit period, that contains the following information:

3.3.1.1. Daily volumes of DAF sludge, press water and precooker water removed from the permittee's facility, and loaded into the disposal vessel reported in gallons per day and tons per day;

3.3.1.2. Monthly waste stream analyses demonstrating that the waste materials being dumped comply with the permitted limits of constituents listed in Special Condition 2.4;

3.3.1.3. Monthly analyses of the additional parameters listed in Special Condition 3.1; and

3.3.1.4. The monthly amount of coagulant polymer and alum added to the waste streams reported in pounds.

3.3.2. Such reports, including a statistical analysis of parameter variability and comparison with the permit limits, shall be submitted to EPA Region 9, ASEPA, NMFS USFWS and WPRFMC within 45 days of the end of the preceding 6-month period for which they were prepared. The reports shall be submitted within this time unless extenuating circumstances are communicated to EPA Region 9 and the ASEPA in writing.

3.3.3. A summary report of all 6-month reports listed in Special Condition 3.3.1, including a statistical analyses of parameter variability, comparisons with permit limits and a detailed discussion of the summary results, shall be submitted by the permittee to EPA and the ASEPA 45 days after the permit expires.

3.3.4. Upon detection of a violation of any permit condition, the permittee shall send a written notification of this violation to EPA Region 9 and the ASEPA within five working days and a detailed written report of the violation shall be sent to the agencies within 15 working days. This notification shall pertain to any permit limits, defined in Special Condition 2.4, that are exceeded; and any disposal operation that occurs outside the disposal site defined in Special Condition 2.2.

3.3.5. One year from the effective date of this special permit, the permittee shall submit a report to EPA and ASEPA on the concentrations of heavy metals and petroleum hydrocarbons that have been measured in each of the waste streams since 1986. This report shall contain the following information:

3.3.5.1. All data obtained from waste stream analyses measured at the permittee's plant, including means, standard deviations and statistical analyses;

3.3.5.2. Evaluation of the accuracy and precision of the data provided by the permittee's contractor, including quality assurance/quality control data, and measures necessary to improve the accuracy and precision of data reported to EPA and ASEPA;

3.3.5.3. Engineering analysis of the source of these heavy metals and petroleum hydrocarbons;

3.3.5.4. Proposed methods or requirements for reducing concentrations of these heavy metals and petroleum hydrocarbons in the waste streams by factors of 10%, 50% and 95%. These proposals should include plant engineering and economic analyses for each level of reduction.

3.3.5.5. EPA and ASEPA will evaluate the report to determine possible requirements for plant modification, waste stream treatment or other special conditions to eliminate the concentrations of heavy metals and petroleum hydrocarbons in the permittee's waste streams.

3.3.6. One year from the effective date of this special permit, the permittee shall submit a report to EPA and ASEPA on the accuracy and precision of all data reported from 1980 to the present for waste stream flows and analyses of the waste streams, including DAF sludge, press water and precooker water. These data shall include test results for total solids, 5-day biological oxygen demand, total phosphorus, total nitrogen, oil and grease, pH, total volatile solids, density and ammonia, not heavy metals or petroleum hydrocarbon concentrations. This report shall contain the following information:

3.3.6.1. All data obtained from waste stream analyses measured at the permittee's plant, including means, standard deviations, regression analysis and time-series analysis;

3.3.6.2. Evaluation of the accuracy and precision of the data provided by the permittee's contractor, evaluation of all laboratory quality assurance/quality control reports, and measures necessary to improve the accuracy and precision of the data reported to EPA and ASEPA; and

3.3.6.3. EPA and ASEPA will evaluate the report to determine possible requirements to improve sample or data analyses for the permittee's waste streams.

4. SPECIAL CONDITIONS - VESSEL OPERATIONS

Specifications for vessel operations are required to limit dumping activities to the dump site identified in Special Condition 2.2 and to record all dumping activities.

Fish processing wastes from the permittee's waste streams and those of other authorized permittees may be loaded into the disposal vessel together. If the waste transported to the disposal site is a combination of materials from the two plants, then the companies shall each be liable for all permit conditions regarding disposal of the wastes. If the wastes disposed at the site are only fish processing wastes generated at the StarKist Samoa plant, then StarKist Samoa shall be solely liable for all permit conditions pertaining to the disposal operation. The volume of material loaded into the disposal vessel by the permittee shall be reported as specified in Special Condition 4.7.2.3.

4.1. Posting of the Permit

This permit, or a true copy thereof, shall be placed in a conspicuous place on any vessel which will be used for the transportation and dumping authorized by this permit. If the dumping vessel is an unmanned barge, the permit or true copy of the permit shall be transferred to the towing vessel.

4.2. Vessel Identification

Every vessel engaged in the transportation of wastes for ocean disposal shall have its name and number painted in letters and numbers at least fourteen (14) inches high on both sides of the vessel. The name and number shall be kept distinctly legible always, and a vessel without such markings shall not be used to transport or dump waste material.

4.3. Determination of the Disposal Location Within the Dump Site

On each disposal trip, the master of the disposal vessel shall determine the location of the disposal operation as follows:

4.3.1. The disposal vessel, as defined under WASTE TRANSPORTER on page 1 of this permit, shall proceed directly to the center of the disposal site at the location specified in Special Condition 2.2.

4.3.2. The master of the vessel shall observe the conditions at the dump site center, noting the vessel's position (latitude and longitude), wind direction and observed surface current direction.

4.3.3. After the conditions defined in Special Condition 4.3.2 have been recorded, the master of the disposal vessel shall proceed 1.1 nautical miles up current from the center of the disposal site and record the position of the disposal vessel (latitude and longitude). This position shall be the starting point for the disposal operation for the trip.

4.3.4. This procedure shall be repeated for each disposal trip.

4.3.5. The master of the disposal vessel shall prepare a navigational plot of the procedures defined in Special Conditions 4.3.1 to 4.3.3 and supply these to the permittee. The permittee shall submit these plots in the 6-month reports required under Special Condition 3.3.1. The navigational plot shall include:

4.3.5.1. The disposal vessel's course during the entire dumping operation; and

4.3.5.2. The times and location of entry and exit from the disposal site, position and time of arrival at the center of the disposal site, position and time of arrival at the location 1.1 nautical miles up current from the disposal site, beginning and ending of dumping, and disposal vessel position plotted every 15 minutes while dumping.

4.3.6. The master of the disposal vessel shall sign and date each plot.

4.3.7. The master of the disposal vessel shall certify that disposal occurred in the manner required by the permit.

4.4. Disposal Rate and Vessel Speed

4.4.1. The disposal vessel/barge shall discharge the material authorized by this permit beginning at the disposal location as determined by Special Condition 4.3.3. Disposal shall only be authorized within the dump site boundaries on a line 1.0 nautical miles on either side of the starting point determined in Special Condition 4.3.3. The entire disposal vessel track shall be 2.0 nautical miles. The vessel track shall be in a direction that is perpendicular to the current detected at the center of the disposal site as defined in Special Condition 2.2.

4.4.1.1. From June 1 through November 30, the disposal operation at the location plotted in Special Condition 4.3.3. shall be conducted at a rate of 140 gallons per minute per knot, not to exceed 1,400 gallons per minute at a maximum speed of 10 knots.

4.4.1.2. From December 1 through May 31, the disposal operation at the location plotted in Special Condition 4.3.3. shall be conducted at a rate of 120 gallons per minute per knot, not to exceed 1,200 gallons per minute at a maximum speed of 10 knots.

4.5. Navigational Equipment

The permittee shall employ an onboard electronic positioning system (see reference below) to fix the position of the disposal vessel accurately during all dumping operations. This system is subject to advance approval by EPA Region 9 and the U.S. Coast Guard Liaison Office (CGLO), Pago Pago 15 days after the effective date of the permit.

The following reference should be used in evaluating the electronic positioning system:

Environmental Protection Agency. 1987. Evaluation of Survey Positioning Methods for Nearshore Marine and Estuarine Waters. Office of Marine and Estuarine Protection, Washington, D.C. EPA 430/9-86-003.

4.6. Permitted Times for Disposal Operations

Dumping operations shall be restricted to daylight hours, unless an emergency exists and written authorization is obtained from the CGLO Pago Pago or the ASEPA prior to departure. EPA Region 9 shall be notified no later than 15 working days after the emergency in a written report of the situation.

4.7. Reporting of the Ocean Dumping Vessel Operations

4.7.1. The waste transporter shall maintain and the permittee shall submit copies of a monthly transportation and dumping logbook, including plots of all information requested in Special Condition 4.7.2, to EPA Region 9, CGLO Pago Pago, and the ASEPA as part of the 6-month report.

4.7.2. The logbook shall contain the following information for each waste disposal trip:

4.7.2.1. Permit number, date and serial trip number;

4.7.2.2. The time that loading of the vessel commences and ceases in Pago Pago Harbor;

4.7.2.3. The volume of each waste loaded into the disposal vessel from each fish cannery;

4.7.2.4. The time and navigational position that dumping commences and ceases;

4.7.2.5. A record of vessel speed and direction every 15 minutes during each dumping operation at the disposal site, and a plot on a navigational chart of the vessel's course defined in Special Condition 4.3.5;

4.7.2.6. Observe, note and plot the time and position of any flotable material;

4.7.2.7. Observe, note and plot the wind speed and direction every 30 minutes while dumping wastes at the designated disposal site;

4.7.2.8. Observe and note current direction at the beginning and end of the disposal trip, and the direction of the waste plume at the end of the disposal operation;

4.7.2.9. Observe, note and plot the presence of the previous disposal plume and any unusual occurrences during the disposal trip, or any other information relevant to the assessment of environmental impacts as a result of dumping activities; and

4.7.2.10. Any unusual occurrences noted under Special Condition 4.7.2.9 shall be highlighted in the report defined in Special Condition 3.3.1.

5. SPECIAL CONDITIONS - DUMP SITE MONITORING

The monitoring program for disposal of wastes in the ocean must document effects of disposed wastes on the receiving waters, biota, and beneficial uses of the receiving waters; compliance with EPA's Ocean Dumping Regulations; and determine compliance with permit terms and conditions. Revisions to the monitoring program may be made under the direction of EPA Region 9 at any time during the permit term, in compliance with 40 C.F.R. §§ 223.2 and 223.3. This may include a reduction or increase in the number or parameters to be monitored, the frequency of monitoring, the location of sample stations, or the number and size of samples to be collected.

Implementation of the disposal site monitoring program and all segments of the monitoring program specified in Special Condition 5 and Appendix A shall be the responsibility of the permittee.

5.1. Monitoring Program

The permittee is required to conduct the monitoring program specified by EPA Region 9, defined in Appendix A, as a means of determining the environmental impacts of ocean dumping of the waste. If possible, monitoring cruises shall be scheduled within the first two weeks of each month to allow enough time for laboratory analysis and report writing in compliance with Special Condition 5.2. The permittee shall notify the ASEPA at least 48 hours before any scheduled monitoring activities.

5.2. Monitoring Reports

Monthly site monitoring reports shall be submitted to EPA Region 9, the ASEPA, NMFS, USFWS and WPRFMC with the 6-month reports as specified in Special Condition 3.3.2. The reports shall include: neatly compiled raw data for all sample analyses, quality assurance/quality control data, statistical analysis of sample variability between stations and within samples for each parameter, and a detailed discussion of the results.

5.3. Final Summary Report

5.3.1. A report shall be submitted to EPA Region 9, ASEPA, NMFS, USFWS and WPRFMC 60 days after the permit expires. This report shall summarize all of the data collected during the waste material and dump site monitoring programs specified in this special permit.

5.3.2. At a minimum, the summary report shall contain the following sections:

5.3.2.1. Introduction (including a summary of previous ocean disposal activities),

5.3.2.2. Location of Study Sites,

5.3.2.3. Materials and Methods,

5.3.2.4. Results and Discussion (including comparisons and contrasts with previous data related to disposal of fish processing wastes off American Samoa),

5.3.2.5. Conclusions; and

5.3.2.6. References.

5.4. Quality Assurance/Quality Control

5.4.1. All appropriate phases of the monitoring, sampling, and laboratory analytical procedures shall comply with the EPA Region 9-specified protocols and references listed in Special Condition 3.1.2.

5.4.2. The qualifications of the on-site Principal Investigator in charge of the field monitoring operation at the dump site shall be submitted to EPA Region 9 and the ASEPA for approval before the initial monitoring cruise. Notification of any change in this individual shall be submitted to EPA Region 9 and ASEPA at least 7 days before the cruise is scheduled.

6. SPECIAL CONDITIONS - NOTICE TO REGULATORY AGENCIES

6.1. Notice of Sailing to U.S. Coast Guard

6.1.1. The waste transporter shall provide telephone notification of sailing to CGLO Pago Pago at 633-2299 and the ASEPA at 633-2304 during working hours (7:00 a.m. to 3:30 p.m.) no later than 24 hours prior to the estimated time of departure for the dump site defined in Special Condition 2.2.

6.1.2. The waste transporter shall immediately notify CGLO Pago Pago and the ASEPA upon any changes in the estimated time of departure greater than two hours.

6.1.3. Surveillance of activities at the dump site designated in Special Condition 2.2, may be accomplished by unannounced aerial overflights, a USCG shiprider and/or a ASEPA shiprider who will be on board the towing/conveyance vessel for the entire voyage. Within two hours after receipt of the initial notification the waste transporter will be advised whether or not a shiprider will be assigned to the waste transporter's disposal vessel.

6.1.4. The following information shall be provided to CGLO Pago Pago or the ASEPA in the notification of sailing defined above:

6.1.4.1. The time of departure,

6.1.4.2. Estimated time of arrival at the dump site,

6.1.4.3. Estimated time of departure from the dump site, and

6.1.4.4. Estimated time of return to port.

6.2. Reports and Correspondence

6.2.1. Two copies of all reports and related correspondence required by General Condition 1.9, Special Conditions 3.2, 3.3, 4.7, 5.2, 5.3, 5.4, and all other materials, including applications shall be submitted to EPA Region 9 at the following address:

Office of Pacific Island and Native American Programs
(E-4)
U.S. Environmental Protection Agency, Region 9
1235 Mission Street
San Francisco, California 94103
Telephone (415) 556-5069

6.2.2. Two copies of all reports required by General Condition 1.9 and Special Conditions 4.7 and 6.1 sent to the U.S. Coast Guard shall be submitted to the following address:

Commanding Officer
U.S. Coast Guard Liaison Office
P.O. Box 249
Pago Pago, American Samoa 96799
Telephone (684) 633-2299

6.2.3. Three copies of all reports required by General Condition 1.9 and Special Conditions 3.2, 3.3, 4.7, 5.2, 5.3, 5.4 and 6.1 sent to the American Samoa Environmental Protection Agency shall be submitted to the following address:

Director
American Samoa Environmental Protection Agency
Office of the Governor
Pago Pago, American Samoa 96799
Telephone (684) 633-2304

6.2.4. One copy of the all reports required by Special Conditions 3.3.2, 3.3.3, 5.2 and 5.3 shall be sent to the USFWS, the NMFS and the WPRFMC at the following addresses:

Project Leader
Office of Environmental Services
U.S. Fish and Wildlife Service
300 Ala Moana Boulevard
P.O. Box 50167
Honolulu, Hawaii 96850

Western Pacific Program Officer
National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii 96822-2396

Executive Director
Western Pacific Regional Fishery Management Council
1164 Bishop Street, Suite 1405
Honolulu, Hawaii 96813

Signed this 16th day of July, 1990

For the Regional Administrator:

Keith Takata

Harry Seraydarian
for Director
Water Management Division
U.S. EPA, Region 9

APPENDIX A

SPECIAL OCEAN DUMPING PERMIT OD 90-01
OCEAN DUMP SITE MONITORING PLAN

7. MONITORING OF RECEIVING WATER

Monitoring of the receiving waters at the disposal site defined in Special Condition 2.2 shall be the responsibility of the permittee. Funding and cooperation for site monitoring may be accomplished through an agreement between permittee and other permittees authorized to use the disposal site. Any agreements negotiated between the permittee and other authorized permittees shall be the sole responsibility of the permittee named in this permit. EPA Region 9 requires that a monitoring program be developed that complies with the conditions defined below.

During each monitoring cruise, the waste plume from the disposal vessel shall be sampled by taking discrete water samples for the measurement of parameters listed in Special Condition 7.2.4. Results of the first 6-month monitoring report will be evaluated by EPA Region 9 to determine whether portions of Special Conditions 7 and/or 8 will be revised. The evaluation will be based on documented sampling results and recommendations by the permittee(s).

7.1. Location of Water Sampling Stations

7.1.1. On each sampling cruise, the latitude and longitude of all sampling stations shall be determined and plotted using appropriate navigational equipment.

7.1.2. The Principal Investigator shall ensure that discrete water samples are taken at the locations marked in Figure 1.

7.1.3. The Principal Investigator shall ensure that each sampling station is positioned as close as possible to the middle of the discharge plume according to his best professional judgment.

7.1.4. The following stations shall be sampled on each sampling cruise (see Figure 1):

7.1.4.1. Station 1 shall be the starting point of the dumping operation as determined in Special Condition 4.3.

7.1.4.2. Station 2 shall be 0.25 nautical miles (nm) down-current from Station 1.

7.1.4.3. Station 3 shall be 0.5 nm down-current from Station 1.

7.1.4.4. Station 4 shall be 1.0 nm down-current from Station 1.

7.1.4.5. Station 5 shall be at the leading edge of the discharge plume, but within the plume.

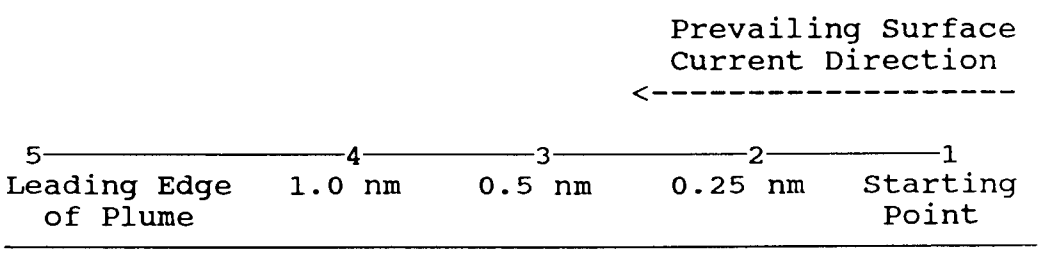


Figure 1. Orientation of Sample Stations (Top View) in the Middle of the Discharge Plume Visually Identified at the Time of Sampling.

7.2. Water Column Characteristics to Be Measured

7.2.1. Discrete water samples at Stations 1, 2, 3, 4, and 5 shall be taken at depths of 1, 3, and 10 meters from the surface at the middle of the plume visually identified by the Principal Investigator.

7.2.2. Surface water conditions shall be recorded at all stations including:

7.2.2.1. Wind speed and direction;

7.2.2.2. Current direction and wave height; and

7.2.2.3. Observations of waste, color (e.g., Forel-Ule color scale), odor, floating materials, grease, oil, scum, and foam.

7.2.3. Water samples shall be obtained using a self-closing 3-liter water sample device at each depth listed in 7.2.1.

7.2.4. Water column parameters analyzed from discrete samples taken at the depths listed in 7.2.1 shall include:

Parameters	Detection Limits
Total Suspended Solids	0.1 mg/L
Total Volatile Suspended Solids	0.1 mg/L
Total Phosphorus	0.001 mg/L
Total Nitrogen	0.001 mg/L
Oil and Grease	0.001 mg/L
Ammonia[a]	0.001 mg/L
pH	0.1 pH units

a = samples should be acidified to pH <2 with sulfuric acid and refrigerated a 4°C until analysis.

7.2.5. If waste stream analyses, described in Special Condition 3.1, identify significantly high levels of constituents that may adversely affect marine water quality, EPA Region 9 may require that those constituents be added to the list of water column parameters in 7.2.4 above.

7.2.6. Temperature measurements shall be taken at depths of 1, 3, and 10 meters at the starting point of the disposal operation, as defined in Special Condition 4.3.3.

7.3. Frequency of Sampling

7.3.1. Water samples shall be collected when dumping operations occur. Each station listed under Special Condition 7.1 shall be sampled once each month. These samples shall be used to characterize the receiving waters at the disposal site.

7.3.2. Control samples shall be taken at Station 1 prior to dumping activities.

7.3.3. Station 1 shall be sampled at a point within the plume immediately after discharge operations cease.

7.3.4. Stations 2 through 5 shall be sampled consecutively at distances indicated in Special Condition 7.1.4 to allow efficient sampling of the discharge plume. The time between each sample and the sampling location, beginning with the control sample and ending with the sample collected at the leading edge of the plume, shall be recorded.

7.4. Water Quality Criteria and Standards

7.4.1. The limited permissible concentration (LPC) of the liquid phase of the waste material shall not be exceeded at the disposal site boundary four hours after disposal operations cease. The LPC is that concentration of the material which, after allowance for initial mixing as defined at 40 C.F.R. § 227.29, does not exceed applicable American Samoa Oceanic Water Quality Standards. EPA Region 9 and the ASEPA will evaluate the LPC based on EPA's Ocean Dumping Regulations and the water quality values obtained for the stations sampled during the tenure of this permit.

7.4.2. The following standards apply to American Samoa oceanic water:

Parameter	Median not to exceed given value
Turbidity (NTU)	0.20
Total Phosphorus (ug-P/L)	11.00

Parameter (cont.)	Median not to exceed given value
Total Nitrogen (ug-N/L)	115.00
Chlorophyll a (ug/L)	0.18
Light Penetration Depth (feet)	150*
Dissolved Oxygen (DO)	Not less than 80% of saturation or less than 5.5 mg/L. If the natural level of DO is less than 5.5 mg/L, then the natural DO shall become the standard.
pH	The range shall be 6.5 to 8.6 pH units and within 0.2 pH units of that which would occur naturally.

*To exceed the given value 50% of the time.

8. MONITORING OF BIOLOGICAL COMMUNITIES

8.1. Pelagic Resources

8.1.1. All sightings of fish, sea turtles, sea birds, or cetaceans near the disposal site shall be recorded including:

8.1.1.1. Time, location and bearing;

8.1.1.2. Species name(s); and

8.1.1.3. Approximate number of individuals.

5 AUG 1991
Cpy to P. Cotter

StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

July 29, 1991

OPINAP (E-4)
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Protection Agency
Office of the Governor
Pago Pago, American Samoa 96799

Gentlemen:

Attached are two reports by StarKist Samoa Inc. submitted in fulfillment of the requirements under Paragraphs 3.3.5 and 3.3.6 of its Ocean Dumping Permit OD 90-01 Special.

Sincerely,

StarKist Samoa,Inc.

Maurice W. Callaghan
General Manager

Attachments

cc: W. Adams
R. Higgins
R. Ward
N. Wei

Report on Heavy Metals and Total Petroleum Hydrocarbons

Submitted to
US EPA Region 9
American Samoa EPA

By
StarKist Samoa Inc.
30 July 1991

Purpose of this Report

This report fulfills the requirements of Paragraph 3.3.5 of StarKist Samoa's Ocean Dumping Permit OD 90-01 Special.

Heavy Metals

Table 1 presents the statistical summary of the data on heavy metals for the StarKist Samoa's DAF sludge, cooker juice and press liquor. Monthly data are attached in Exhibit A.

For comparison purpose, sampling results from StarKist Samoa's NPDES Toxic Substance Monitoring Program are presented in Table 2. Such analyses show that the concentrations of metals in the cooker water and press liquor are in the same range as those in the thaw water (Bay water).

In general, the levels of metals in the DAF sludge are about one order of magnitude higher than those in the Bay water used for fish thawing, which comprises approximately 50 percent of the wastewater stream. Such magnification is to be expected since any precipitated metals would be concentrated in the DAF float. Heavy metals, with the exception of aluminum, are less than 0.8 mg/l in the cooker juice and press liquor. The high level of aluminum in the sludge is a direct result of the addition of aluminum sulfate in the wastewater treatment plant for the purpose of removing nutrients and solids. There are no known external sources of heavy metals other than those coming from normal weathering of roofing and tank material.

Total Petroleum Hydrocarbon (TPH)

Under StarKist Samoa's Special Ocean Dumping Permit, TPH is required to be analyzed by using EPA Method 418.1. Results obtained by using this required method have shown elevated levels of TPH in all three waste streams.

There has always been concern on the part of the plant that these elevated "TPHs" might have been caused by analytical interference in the EPA Method 418.1 due to high concentrations of fish oil (normal in a tuna canning operation). Discussions were held with the contract laboratory, AECOS of Hawaii, which confirmed the possibility of analytical interference and recommended several more refined analytical techniques for pin-pointing petroleum hydrocarbon sources. A copy of the letter (dated February 14, 1990) from the laboratory's chemist is attached in Exhibit B.

In accepting AECOS's suggestion, StarKist Samoa contracted with Med-Tox Associates Laboratory in California to analyze split samples of the cooker juice, press liquor and DAF sludge over a

period of six months beginning in August of 1990. Med-Tox was asked to specifically analyze for petroleum products such as diesel fuel and motor oil in these waste streams. Methods used were GC/FID and EPA Method 8015 (modified).

Table 3 shows the large discrepancy between the Med-Tox results and those obtained through EPA Method 418.1 with Med-Tox's results being much lower in many instances. It is very likely that the elevated levels of TPHs as determined by EPA Method 418.1 consisted mainly of fish oil.

The results from Med-Tox are much more in line with the nature of the cannery's operation. Petroleum products are not been detected in cooker juice. Press liquor does contain some elevated levels of diesel and machine oil as a result of normal operation and equipment failure. The probable primary sources of petroleum products in the DAF sludge are likely plant washdown water and stormwater which partially drains from the street into the wastewater treatment plant.

Accuracy and Precision of Data

All the heavy metals and TPH analyses have been and are being performed by AECOS Lab of Hawaii. This is the same lab that is used by ASEPA for monthly monitoring of the Pago Pago Harbor. Exhibit C shows the methods and quality control procedures used by the lab. The accuracy and limitation of the TPH analyses (using EPA Method 418.1) are outlined in Exhibit B.

The split samples for quantitative identification of petroleum hydrocarbon were performed by Med-Tox Associates, a California DHS certified laboratory. A copy of Med-Tox's Quality Assurance Manual (dated July 1990) is available for inspection. Based on Med-Tox's analyses of six split samples, the TPH results as determined by Method 418.1 appear to be over estimates.

Proposed Methods of Source Reduction

In order to minimize the input of diesel and motor oil into its waste streams, StarKist Samoa will implement good house keeping practices. In addition, the plant has already put in place or is in the process of evaluating the following specific remedial measures:

1. The plant is in the process of testing out an industrial vacuum system which is designed to minimize plant wash down water. This may reduce the levels of petroleum hydrocarbon by 10 percent. The cost of this test system is in excess of $30,000 and should be in place by December 1991.

2. The plant is implementing a waste oil recovery tracking system for the waste oil that is burned as fuel in the boilers. The system, when fully implemented will eliminate any inadvertent discharge of waste oil into the wastewater treatment system. The cost of this tracking system is $10,000.

3. The plant is planning to replace the existing fishmeal press at a cost of $200,000. Such replacement is expected to significantly reduce the amount of diesel oil in the press liquor by as much as 50 percent or more. The projected time of installation is April 1992.

4. The plant is seeking senior management's approval to replace the entire fishmeal plant at a cost of $4,000,000. The projected completion date is the end of 1993. This project also includes a multi-stage distillation unit which could eliminate the need for ocean disposal of the high strength wastes.

D:\samoa\report.tph

Table 1: Statistical Summary of Heavy Metals and TPH

Parameters		DAF Sludge Average	DAF Sludge Maximum	DAF Sludge Minimum	# of Samples	DAF Sludge Std Dev
Al	(mg/l)	197	520	20	48	115
Cr	(mg/l)	1.13	2.62	0.22	49	0.50
Ni	(mg/l)	0.99	3.10	0.15	48	0.51
Cu	(mg/l)	2.55	5.21	0.65	48	1.03
Pb	(mg/l)	1.32	3.00	0.15	48	0.54
Cd	(mg/l)	0.46	1.01	0.09	48	0.19
Hg	(mg/l)	0.013	0.042	0.000	48	0.009
TPH	(mg/l)	2,546	7,000	610	36	1,523

Parameters		Cooker Juice Average	Cooker Juice Maximum	Cooker Juice Minimum	# of Samples	Cooker Juice Std Dev
Al	(mg/l)	0.74	1.80	0.10	37	0.43
Cr	(mg/l)	0.16	0.67	0.01	36	0.12
Ni	(mg/l)	0.46	2.17	0.03	37	0.36
Cu	(mg/l)	0.31	1.04	0.03	37	0.22
Pb	(mg/l)	0.22	0.40	0.10	36	0.10
Cd	(mg/l)	0.20	0.43	0.05	36	0.11
Hg	(mg/l)	0.007	0.042	0.001	37	0.007
TPH	(mg/l)	80	340	5	35	75

Parameters		Press liquor Average	Press liquor Maximum	Press liquor Minimum	# of Samples	Press liquor Std Dev
Al	(mg/l)	1.55	3.60	0.10	37	0.82
Cr	(mg/l)	0.24	1.17	0.03	37	0.23
Ni	(mg/l)	0.62	2.30	0.03	37	0.44
Cu	(mg/l)	0.78	1.35	0.21	36	0.34
Pb	(mg/l)	0.45	1.10	0.10	37	0.22
Cd	(mg/l)	0.51	1.00	0.18	37	0.23
Hg	(mg/l)	0.018	0.037	0.004	37	0.008
TPH	(mg/l)	535	1,600	81	36	412

Outliers outside the range of +/– two times standard deviation are excluded

D:\samoa\summary.wk3 18–Jul–91

Table 2: **Comparison with Bay Water**

	Average Concentrations in mg/l				
	Bay Water *		Cooker	Press	DAF
	1/16/90	10/31/90	Juice	Liquor	Sludge
Cadmium	0.060	0.059	0.195	0.507	0.464
Chromium	0.200	0.120	0.164	0.243	1.134
Lead	0.700	0.170	0.224	0.454	1.317
Nickel	–	–	0.456	0.623	0.986
Copper	–	–	0.308	0.781	2.553
Aluminum	–	–	0.744	1.554	197
Mercury	0.005	0.042	0.007	0.018	0.013

* Results from StarKist Samoa's NPDES Toxic Substance Monitoring Program

Table 3: **Special Hydrocarbon Analyses of StarKist Samoa Samples**

Split Sample Results

	GD/FID or EPA 8015			EPA 418.1
Date of Sampling	Sample Analyzed	Analytical Method	Conc as diesel or motor oil (ppm)	Conc as TPH (ppm)
Aug 30, 1990	Cooker juice	GC/FID	0 as diesel	
			910 as motor oil	< 60
	Press liquor	GC/FID	0 as diesel	
			0 as motor oil	500
	SKS sludge	GC/FID	85 as diesel	
			0 as motor oil	3,000
Sept 13, 1990	Cooker juice	GC/FID	0 as diesel	
			350 as motor oil	< 60
	Press liquor	GC/FID	0 as diesel	
			1900 as motor oil	2,000
	SKS sludge	GC/FID	0 as diesel	
			1100 as motor oil	3,000
Oct 26, 1990	Cooker juice	EPA 8015	0 as diesel	< 30
	Press liquor	EPA 8015	1800 as diesel	1,600
	SKS sludge	EPA 8015	230 as diesel	1,300
Nov 9, 1990	Cooker juice	EPA 8015	0 as diesel	56
	Press liquor	EPA 8015	300 as diesel	1,400
	SKS sludge	EPA 8015	160 as diesel	1,700
Dec 14, 1990	Cooker juice	EPA 8015	0 as diesel	
			0 as motor oil	40
	Press liquor	EPA 8015	300 as diesel	
			0 as motor oil	710
	SKS sludge	EPA 8015	830 as diesel	
			7900 as motor oil	7,000
Jan 10, 1991	Cooker juice	EPA 8015	0 as diesel	
			0 as motor oil	65
	Press liquor	EPA 8015	0 as diesel	
			0 as motor oil	680
	SKS sludge	EPA 8015	0 as diesel	
			0 as motor oil	2,565

GC/FID and EPA 8015 analyses performed by Med–Tox Associates of California.
TPH analyses performed by AECOS Lab of Hawaii using EPA Method 418.1
Undetected values are reported as 0 mg/l.

D:\samoa\summary.wk3 18–Jul–91

Exhibit A

Monthly Data Summary

Monthly Summary Data for Heavy Metals and TPH

Parameters		Mar 87 DAF sludge	Apr 87 DAF sludge	May 87 DAF sludge	Jun 87 DAF sludge	July 87 DAF sludge	Aug 87 DAF sludge	Sept 87 DAF sludge	Oct 87 DAF sludge	Nov 87 DAF sludge	Dec 87 DAF sludge	Jan 88 DAF sludge	Feb 88 DAF sludge	Mar 88 DAF sludge	Apr 88 DAF sludge	May 88 DAF sludge	June 88 DAF sludge	July 88 DAF sludge
Al	(mg/l)	263	260	335	411	342	275	353	233	368		323	271	204	97	151	177	87
Cr	(mg/l)	0.28	1.01	1.01	0.33	1.31	1.88	0.91	0.74	2.62	1.48	1.98	1.68	2.04	0.98	2.24	1.98	1.11
Ni	(mg/l)		0.55	0.63	0.15	0.60	0.62	0.68	0.42	1.24	2.00	1.25	1.24	1.23	0.48	0.76	0.70	0.64
Cu	(mg/l)	1.62	2.09	2.39	0.65	0.84	1.09	2.62	2.44	3.69	4.00	2.85		3.98	2.52	3.06	2.77	2.32
Pb	(mg/l)	1.01	1.49	1.29	0.15	1.44	1.00	1.19	1.27		1.80	2.24	2.07	2.05	1.49	1.80	1.47	1.22
Cd	(mg/l)	1.01	0.527	0.595	0.096	0.662	0.468	0.453	0.632	0.63		0.60	0.647	0.64	0.633	0.52	0.432	0.295
Hg	(mg/l)	0.000	0.000	0.042	0.007	0.010	0.010	0.015	0.011	0.030	0.025	0.034	0.017	0.021	0.014	0.010	0.012	0.010
TPH	(mg/l)													2,450	2,600	3,900	4,650	1,400

Parameters		Mar 87 Cooker Juice	Apr 87 Cooker Juice	May 87 Cooker Juice	Jun 87 Cooker Juice	July 87 Cooker Juice	Aug 87 Cooker Juice	Sept 87 Cooker Juice	Oct 87 Cooker Juice	Nov 87 Cooker Juice	Dec 87 Cooker Juice	Jan 88 Cooker Juice	Feb 88 Cooker Juice	Mar 88 Cooker Juice	Apr 88 Cooker Juice	May 88 Cooker Juice	June 88 Cooker Juice	July 88 Cooker Juice
Al	(mg/l)													0.46	0.70	0.40	0.10	0.30
Cr	(mg/l)													0.29	0.28	0.20	0.01	0.03
Ni	(mg/l)													0.10	0.03	0.28	0.30	0.29
Cu	(mg/l)													0.12	0.23	0.20	0.08	0.06
Pb	(mg/l)													0.24	0.19	0.34	0.40	0.24
Cd	(mg/l)													0.07	0.10	0.10	0.12	0.20
Hg	(mg/l)													0.003	0.003	0.003	0.006	0.005
TPH	(mg/l)													5	5	5	39	100

Parameters		Mar 87 Press liquor	Apr 87 Press liquor	May 87 Press liquor	Jun 87 Press liquor	July 87 Press liquor	Aug 87 Press liquor	Sept 87 Press liquor	Oct 87 Press liquor	Nov 87 Press liquor	Dec 87 Press liquor	Jan 88 Press liquor	Feb 88 Press liquor	Mar 88 Press liquor	Apr 88 Press liquor	May 88 Press liquor	June 88 Press liquor	July 88 Press liquor
Al	(mg/l)													0.98	0.97	0.43	0.30	1.20
Cr	(mg/l)													0.35	0.16	0.06	0.03	0.04
Ni	(mg/l)													0.03	0.13	0.24	0.36	0.26
Cu	(mg/l)													0.37	0.60	0.51	0.38	0.51
Pb	(mg/l)													0.29	0.42	0.26	0.54	0.33
Cd	(mg/l)													0.18	0.29	0.25	0.26	0.43
Hg	(mg/l)													0.009	0.009	0.01	0.024	0.023
TPH	(mg/l)													280	95	240	310	290

Parameters		Aug 88 DAF sludge	Sept 88 DAF sludge	Oct 88 DAF sludge	Nov 88 DAF sludge	Dec 88 DAF sludge	Jan 89 DAF sludge	Feb 89 DAF sludge	Mar 89 DAF sludge	Apr 89 DAF sludge	May 89 DAF sludge	June 89 DAF sludge	July 89 DAF sludge	Aug 89 DAF sludge	Sept 89 DAF sludge	Oct 89 DAF sludge	Nov 89 DAF sludge	Dec 89 DAF sludge
Al	(mg/l)	146	231	68	126	40	144	178	97	99	133	171	44	144	215	98	265	460
Cr	(mg/l)	1.24	0.85	1.10	0.99	0.83	1.40	1.24	0.91	0.99	1.01	0.89	0.92	1.10	1.03	0.56	0.86	0.87
Ni	(mg/l)	0.82	0.91	1.06	1.34	1.13	1.51	0.27	1.07	0.91	1.68	0.85	0.82	0.89	1.40	0.50		1.00
Cu	(mg/l)	3.25	1.73	2.15	1.79	2.24	2.56	1.93	2.00	1.97	1.55	1.83	1.63	2.14	4.25	1.70	1.60	4.10
Pb	(mg/l)	1.47	1.10	1.00	1.14	0.90	1.40	0.92	1.49	1.38	1.33	1.39	0.93	2.37	1.20	0.80	1.40	0.60
Cd	(mg/l)	0.746	0.422	0.475	0.600	0.680	0.615	0.545	0.530	0.485	0.455	0.440	0.460	0.450	0.500	0.380	0.625	
Hg	(mg/l)	0.014		0.026	0.012	0.012	0.015	0.011	0.013	0.010	0.010	0.020	0.012	0.008	0.031	0.013	0.017	0.013
TPH	(mg/l)	1,950	1,200		1,950	5,680		2,400	5,650	5,750	1,800	2,600	1,550	2,250	1,750	2,050	2,550	3,350

Parameters		Aug 88 Cooker Juice	Sept 88 Cooker Juice	Oct 88 Cooker Juice	Nov 88 Cooker Juice	Dec 88 Cooker Juice	Jan 89 Cooker Juice	Feb 89 Cooker Juice	Mar 89 Cooker Juice	Apr 89 Cooker Juice	May 89 Cooker Juice	June 89 Cooker Juice	July 89 Cooker Juice	Aug 89 Cooker Juice	Sept 89 Cooker Juice	Oct 89 Cooker Juice	Nov 89 Cooker Juice	Dec 89 Cooker Juice
Al	(mg/l)	0.50	1.00	0.50	1.50	0.40	0.30	0.37	0.30	0.20	0.80	1.00	0.30	0.70	0.90	0.50	0.70	0.60
Cr	(mg/l)	0.16	0.09	0.16	0.06	0.12	0.06	0.09	0.15	0.10	0.19	0.08	0.18	0.14	0.28	0.13	0.09	0.21
Ni	(mg/l)	0.27	0.48	2.17	0.46	0.77	0.15	0.56	0.55	0.27	0.40	0.35	0.56	0.13	0.30	0.30		0.50
Cu	(mg/l)	0.06	0.09	0.07	0.18	0.05	0.11	0.05	0.07	0.03	0.29	0.41	0.28	0.52	0.36	0.33	0.19	0.41
Pb	(mg/l)	0.18	0.20	0.15	0.19	0.11	0.13	0.12	0.33	0.15	0.25	0.26	0.25		0.10	0.10	0.20	0.20
Cd	(mg/l)	0.16	0.16	0.07	0.13	0.08	0.07	0.05	0.05	0.08	0.28	0.30	0.20	0.34	0.34	0.25	0.40	
Hg	(mg/l)	0.003	0.006	0.003	0.001	0.001	0.003	0.005	0.004	0.001	0.007	0.009	0.005	0.009	0.009	0.006	0.008	0.008
TPH	(mg/l)	25	5	74	45	300		92	100	340	190	191		71	50	50	64	180

Parameters		Aug 88 Press liquor	Sept 88 Press liquor	Oct 88 Press liquor	Nov 88 Press liquor	Dec 88 Press liquor	Jan 89 Press liquor	Feb 89 Press liquor	Mar 89 Press liquor	Apr 89 Press liquor	May 89 Press liquor	June 89 Press liquor	July 89 Press liquor	Aug 89 Press liquor	Sept 89 Press liquor	Oct 89 Press liquor	Nov 89 Press liquor	Dec 89 Press liquor
Al	(mg/l)	0.60	2.90	1.20	2.40	0.10	1.20	1.40	0.80	2.50	2.60	1.50	2.30	1.70	2.10	0.80	1.40	1.40
Cr	(mg/l)	0.13	0.10	0.19	0.14	0.14	0.26	0.18	0.04	0.13	0.49	0.19	0.57	0.07	0.38	0.19	0.22	0.12
Ni	(mg/l)	0.26	0.44	1.42	0.83	0.45	0.45	0.10	1.00	0.29	1.29	0.39	0.52	0.57	0.70	0.30		0.50
Cu	(mg/l)	0.50	0.41	0.35	0.42	0.31	0.71	0.21	0.41	0.44	1.09	1.07	1.35	1.25	1.20	0.72	0.21	1.20
Pb	(mg/l)	0.43	0.30	0.70	0.14	0.22	0.47	0.20	0.28	0.40	1.10	0.54	0.76	0.81	0.50	0.30	0.10	0.80
Cd	(mg/l)	0.39	0.30	0.22	0.35	0.27	0.40	0.22	0.27	0.36	0.73	0.57	1.00	0.74	0.82	0.42	0.71	
Hg	(mg/l)	0.018	0.017	0.015	0.013	0.019	0.013	0.008	0.010	0.012	0.018	0.007	0.016	0.022		0.031	0.037	0.019
TPH	(mg/l)	295	140	150	150	441	630	860	270		81	780	1,100	1,100	130	310	420	1,100

Parameters		Jan 90 DAF sludge	Feb 90 DAF sludge	Apr 90 DAF sludge	May 90 DAF sludge	Jun 90 DAF sludge	Jul 90 DAF sludge	Aug 90 DAF sludge	Sept 90 DAF sludge	Oct 90 DAF sludge	Nov 90 DAF sludge	Dec 90 DAF sludge	Jan 91 DAF sludge	Feb 91 DAF sludge	Mar 91 DAF sludge	Apr 91 DAF sludge	May 91 DAF sludge
Al	(mg/l)	338	267	182	95	79	112	248	107	209	38		183	20	520	162	93
Cr	(mg/l)	1.09	0.80	0.84	0.61	1.73	1.15	1.39	1.25	0.88	0.22	1.30	0.80		1.88	0.72	0.53
Ni	(mg/l)	1.06	0.92	0.90	0.60	1.20	1.10	1.00	1.00	0.70	0.60	1.70	1.20	3.10	1.90	0.40	0.60
Cu	(mg/l)	2.03	1.87	2.21	1.83	1.66	5.21	4.04	4.05	1.81	2.98	4.53	4.35	2.83		2.26	3.55
Pb	(mg/l)		1.13	1.60	0.90	0.90	1.70	1.90	2.10	0.80	0.60	1.90	0.50	0.80	3.00	0.60	1.00
Cd	(mg/l)	0.480	0.380	0.580	0.310	0.200	0.130	0.35	0.28	0.15	0.10	0.57	0.535	0.09	0.41	0.10	0.36
Hg	(mg/l)	0.012	0.014	0.027	0.011	0.004	0.007		0.008	0.005	0.005	0.009	0.008	0.005	0.006	0.008	0.005
TPH	(mg/l)	615	935	765	1,700	1,950	725	3,000	3,000	1,300	1,700	7,000	2,565	610	3,000	2,900	2,400

Parameters		Jan 90 Cooker Juice	Feb 90 Cooker Juice	Apr 90 Cooker Juice	May 90 Cooker Juice	Jun 90 Cooker Juice	Jul 90 Cooker Juice	Aug 90 Cooker Juice	Sept 90 Cooker Juice	Oct 90 Cooker Juice	Nov 90 Cooker Juice	Dec 90 Cooker Juice	Jan 91 Cooker Juice	Feb 91 Cooker Juice	Mar 91 Cooker Juice	Apr 91 Cooker Juice	May 91 Cooker Juice
Al	(mg/l)	1.60	0.94	1.30	0.50	0.50	0.90	1.10	1.10	1.10	0.60	0.50	1.75	0.50	1.80		0.80
Cr	(mg/l)	0.20	0.07	0.16		0.67	0.07	0.09	0.38	0.28	0.04	0.18	0.25		0.15	0.21	0.05
Ni	(mg/l)	0.30	0.50	0.60	1.07	0.50	0.70	0.30	0.10	0.50	0.30	0.50	0.57	0.90	0.40	0.20	0.20
Cu	(mg/l)	0.44	0.46	0.57	0.37	0.42	0.38	0.24	0.40	0.28	0.56	0.51	1.04		0.71	0.49	0.35
Pb	(mg/l)		0.22	0.30	0.20	0.30	0.10	0.40	0.30	0.20	0.10	0.10	0.20	0.40	0.40	0.40	0.10
Cd	(mg/l)	0.38		0.43	0.24	0.40	0.10	0.18	0.16	0.22	0.32	0.21	0.26	0.15	0.20	0.08	0.16
Hg	(mg/l)	0.007	0.009	0.009	0.006		0.042	0.005	0.007	0.005	0.005	0.005	0.005	0.018	0.008	0.005	0.005
TPH	(mg/l)	50	50		100	100	50	60	60	30	56	40	65	40	30	90	60

Parameters		Jan 90 Press liquor	Feb 90 Press liquor	Apr 90 Press liquor	May 90 Press liquor	Jun 90 Press liquor	Jul 90 Press liquor	Aug 90 Press liquor	Sept 90 Press liquor	Oct 90 Press liquor	Nov 90 Press liquor	Dec 90 Press liquor	Jan 91 Press liquor	Feb 91 Press liquor	Mar 91 Press liquor	Apr 91 Press liquor	May 91 Press liquor
Al	(mg/l)	2.10	3.40	1.80	2.30	1.00	1.30	1.90	2.10	1.10	0.80	1.90	0.80		1.80	3.60	0.80
Cr	(mg/l)	0.25	1.17	0.20	0.81	0.67	0.17	0.28	0.15	0.16	0.06	0.20	0.23		0.15	0.19	0.11
Ni	(mg/l)	0.50	1.07	0.90	1.08	1.20	0.70	0.80	0.70	0.60	0.20	0.43	0.53	2.30	0.40	0.70	0.40
Cu	(mg/l)	1.15	1.12	1.10	1.12	0.90	0.84	1.32	0.80	0.74	1.01	1.04			0.71	1.09	0.96
Pb	(mg/l)	0.60	0.36	0.70	0.50	0.40	0.40	0.80	0.60	0.40	0.40	0.39	0.25		0.60	0.30	0.20
Cd	(mg/l)	0.92	0.63	0.89	0.57	0.39	0.20	0.73	0.54	0.60	0.83	0.60	0.91	0.64	0.49	0.29	0.37
Hg	(mg/l)	0.027	0.023	0.028	0.019	0.004	0.011	0.029	0.030	0.015	0.020	0.013	0.013	0.023	0.013	0.024	0.011
TPH	(mg/l)	200	200	500	250	260	100	500		1,600	1,400	710	680	1,400	990	626	668

28 JAN 1991

Star-Kist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440
TELEX: 782-509
ANSWERBACK: STARKIST SB

19 January 1991

OPINAP (E-4)
U. S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that, pursuant to Condition 3.3.4 of StarKist Samoa's Ocean Dumping Permit OD-90-01 Special, the following permitted limits were exceeded during the months of October and November 1990:

1. The oil and grease concentration of the press liquor was 83,000 mg/l in October and 89,000 mg/l in November. The permitted concentration is 62,150 mg/l.

2. The density for the press liquor in October was reported as 0.94 gm/ml by AECOS, StarKist Samoa's contract laboratory. The minimum permitted density is 0.96 gm/ml. StarKist Samoa's own laboratory recorded a density of 1.02 gm/ml on the same sample.

All other permitted concentrations were met. The average daily volume of wastes (DAF sludge, press liquor, and cooker juice) disposed of at the designated site was approximately 60,000 gallons in October and 72,000 gallons in November, far below the permitted daily volume of 200,000 gallons.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

cc: R. Ward N. Wei H. Tis[illegible]a K. Miller B. Higgins

MONITORING TRIP JANUARY 25, 1991

Monitoring Vessel:	Tasi II
Discharge Vessel:	M/V Astro
Captain:	Mike Crook
Chief Scientist:	George Scanlan
Starkist Representative:	Helen Tisalona

Method of Navigation: All fixes obtained by Ball Bearing Hand compass.

INTRODUCTION

On January 25, 1991, the vessel Tasi II transported personnel to an area approximately seven miles south of Pago Pago Harbor, American Samoa for the purpose of monitoring the disposal of cannery generated wastes into the waters of the Pacific Ocean. This monitoring was conducted in compliance with Appendix A, Special Ocean Dumping Permit OD 90-01, Ocean Dump Site Monitoring Plan, included in Ocean Dumping Permit No. OD-90-02-Special.

Chronology of Events:

0630 Departed Pago Pago Harbor and proceeded to dumpsite permit location.

0755 The Tasi II arrived at the dumpsite location, and the station 1(Control) position was established. Water samples were drawn at 1 meter, 3 meters, and 10 meters. Temperature and pH of the water were taken at depths described above. The wind was blowing at 12 - 13mph from the east. Seas were choppy with 3-4ft swells. Skies were cloudy with scattered cumulus clouds.

0800 M/V ASTRO BEGINS DUMPING OPERATIONS

The Astro arrived in the area and began dumping operations at station 1. The Astro continued discharging material in a circular pattern downwind, until approximately 1120.

1125 STATION 1 MONITORING

Discrete water samples were taken at depths of 1, 3, and 10 meters. Water temperature and pH were also recorded at the various depths described above. The orientation of the sampling stations from 1 to 5 followed a south south west direction per our visual observations. Water samples were drawn in the relative center of the plume. Sea conditions remained the same. The wind was unchanged. The plume appeared to spread over a broader surface area compared to previous monitoring observations.

1135 STATION 2 MONITORING

Station 2 was sampled according to permit specifications. Water samples were collected at depths of 1, 3, and 10 meters. Temperature and pH were taken at depths described above. Latitude and longitude were also determined. Sea conditions remained the same.

1150 STATION 3 MONITORING

Same as station 2.

1200 STATION 4 MONITORING

Same as station 3.

1210 STATION 5 MONITORING

Same as station 4.

BIOLOGICAL OBSERVATIONS

1135 Large flock of seabirds actively feeding at the north north east end of the plume apparently following a large school of Tuna.

1145 The same flock of seabirds of mixed species (Terns, boobies etc.) moving parrallel to and about 100ft from our boat.

No mammals were observed in the plume during this monitoring trip.

STATION POSITIONS AND SAMPLING TIMES

	LATITUDE	LONGITUDE	TIME
Station 1(control)	14.24.0 south	170.38.5 west	0755
Station 1	14.24.1 south	170.37.9 west	1125
Station 2	14.24.8 south	170.38.1 west	1135
Station 3	14.25.7 south	170.37.6 west	1150
Station 4	14.26.2 south	170.38.0 west	1200
Station 5	14.26.4 south	170.38.5 west	1210

George Seahan

OCEAN DUMPING RESEARCH PERMIT: OD-90-1
DATA SHEET

DATE: 1-25-91

SEA CONDITION: CHOPPY WIND: 12-13 mph EAST

STATION:	DEPTH	TEMP.	PH	ODOR	COLOR	TIME
1 CONTROL	1	82°F	8.20	N/A	DEEP	0755
	3	82°F	8.20		BLUE	
	10	82°F	8.18			
1	1	82°F	8.26	FOUL	AQUA	1125
	3	82°F	8.28	TYPICAL		
	10	82°F	8.28	SLUDGE ODOR		
2	1	82°F	8.25	FOUL	AQUA	1135
	3	82°F	8.25	SLUDGE	BLUISH	
	10	82°F	8.26	ODOR		
3	1	82°F	8.20	STRONG	BLUISH	1150
	3	82°F	8.21	PUNGENT		
	10	82°F	8.25	FECAL ODOR		
4	1	82°F	8.22	STRONG	DEEP	1200
	3	82°F	8.24	PUNGENT	BLUE	
	10	82°F	8.26	FECAL ODOR		
5	1	82°F	8.07	FOUL	DEEP	
	3	82°F	8.09	SLIGHTLY	BLUE	1210
	10	82°F	8.10			

NB: Scum + SUSPENDED MATTER OBSERVED AT STATIONS 3 + 4.

MONITORING TRIP JANUARY 10, 1991

Monitoring Vessel:	Tasi II
Discharge Vessel:	M/V Astro
Captain:	Mike Crook
Chief Scientist:	George Scanlan
Starkist Representative:	Helen Tisalona

Method of Navigation: All fixes obtained by Ball Bearing Hand compass.

INTRODUCTION

On January 10, 1991, the vessel Tasi II transported personnel to an area approximately seven miles south of Pago Pago Harbor, American Samoa for the purpose of monitoring the disposal of cannery generated wastes into the waters of the Pacific Ocean. This monitoring was conducted in compliance with Appendix A, Special Ocean Dumping Permit OD 90-01, Ocean Dump Site Monitoring Plan, included in Ocean Dumping Permit No. OD-90-02-Special.

Chronology of Events:

0730 Departed Pago Pago Harbor and proceeded to dumpsite permit location.

0900 The Tasi II arrived at the dumpsite location, and the station 1(Control) position was established. Water samples were drawn at 1 meter, 3 meters, and 10 meters. Temperature and pH of the water were taken at depths described above. The wind was blowing at 5 mph with surges to 10mph from the east north east. The sea was calm with 1-1 1/2ft swells. Skies were cloudy with a heavy overcast in land. Light rain showers fell occassionally through out the day.

M/V ASTRO BEGINS DUMPING OPERATIONS

The Astro arrived in the area and began dumping operations at station 1. The Astro continued discharging material in a circular pattern downwind, until approximately 1220.

1225 STATION 1 MONITORING

Discrete water samples were taken at depths of 1, 3, and 10 meters. Water temperature and pH were also recorded at the various depths described above. The orientation of the sampling stations from 1 to 5 followed a southward direction per our visual observations. Water samples were drawn in the relative center of the plume. Sea conditions remained the same with wave heights of about 1 feet. The wind was unchanged.

1235 STATION 2 MONITORING

Station 2 was sampled according to permit specifications. Water samples were collected at depths of 1, 3, and 10 meters. Temperature and pH were taken at depths described above. Latitude and longitude were also determined. Sea conditions remained the same. Floating scum seen at the west boundary of the sludge.

1245 STATION 3 MONITORING

Same as station 2.

1255 STATION 4 MONITORING

Same as station 3. Fine suspended solids seen in water. Thin sheen confining plume at boundaries.

1305 STATION 5 MONITORING

Same as station 4.

BIOLOGICAL OBSERVATIONS

1225 Two brown terns seen over the plume.

No mammals were observed in the plume during this monitoring trip.

STATION POSITIONS AND SAMPLING TIMES

	LATITUDE	LONGITUDE	TIME
Station 1	14.24.2 south	170.39.2 west	1225
Station 2	14.24.3 south	170.39.8 west	1235
Station 3	14.24.8 south	170.39.5 west	1245
Station 4	14.25.6 south	170.39.9 west	1255
Station 5	14.26.0 south	170.40.2 west	1305

George Scanlan

OCEAN DUMPING RESEARCH PERMIT: OD-90-1
DATA SHEET

DATE: 1-10-91						
SEA CONDITION: CALM				WIND: 5-10 mph ENE		
STATION:	DEPTH	TEMP.	PH	ODOR	COLOR	TIME
1 (CONTROL)	1	82°F	8.27	N/A	DEEP BLUE	0900
	3	82°F	8.27			
	10	82°F	8.28			
1	1	82°F	8.35	TRACE	AQUA -	1225
	3	82°F	8.32	FOUL	LIGHT BLUE	
	10	82°F	8.32	SLUDGE ODOR		
2	1	82°F	8.28	SLIGHT	AQUA	1235
	3	82°F	8.27	FOUL		
	10	82°F	8.28			
3	1	82°F	8.32	PUNGENT	MILKY	1245
	3	82°F	8.32	SLUDGE ODOR	DIRT	
	10	82°F	8.32			
4	1	82°F	8.38	SLIGHT	DEEP BLUE	1255
	3	82°F	8.38	FOUL SLUDGE		
	10	82°F	8.39			
5	1	82°F	8.38	LIGHT	DEEP BLUE	1305
	3	82°F	8.38	SLUDGE ODOR		
	10	82°F	8.40			

MONITORING TRIP DECEMBER 14, 1990

Monitoring Vessel:	Tasi II
Discharge Vessel:	M/V Astro
Captain:	Mike Crook
Chief Scientist:	George Scanlan
Starkist Representative:	Helen Tisaloma

Method of Navigation: All fixes obtained by Ball Bearing Hand compass.

INTRODUCTION

On December 14, 1990, the vessel Tasi II transported personnel to an area approximately seven miles south of Pago Pago Harbor, American Samoa for the purpose of monitoring the disposal of cannery generated wastes into the waters of the Pacific Ocean. This monitoring was conducted in compliance with Appendix A, Special Ocean Dumping Permit OD 90-01, Ocean Dump site Monitoring plan, included in Ocean Dumping Permit No. OD-90-02-Special.

Chronology of Events:

0630 Departed Pago Pago Harbor and proceeded to dumpsite permit location.

0755 The Tasi II arrived at the dumpsite location, and the station 1(control) position was established. Water samples were drawn at 1 meter, 3 meters, and 10 meters. Temperature and pH of the water were taken at depths described above. The wind was blowing at 12 - 12 1/2 mph from the east. Surface water current follows a westward drift. Seas were moderately choppy with 2-3ft swells. Skies were cloudy with scattered cumulus clouds.

0805 M/V ASTRO BEGINS DUMPING OPERATIONS

The Astro arrived in the area and began dumping operations at station 1. The Astro continued discharging material in a circular pattern downwind, until approximately 1100.

1100 STATION 1 MONITORING

Discrete water samples were taken at depths of 1, 3, and 10 meters. Water temperature and pH were also recorded at various depths described above. The orientation of the sampling stations from 1 to 5 followed a south to south west line per our visual observations. Water samples were drawn in the relative center of the plume. Sea conditions remained the same with choppy wave action and rising to heights of about 2-3ft . The wind was unchanged.

1110 STATION 2 MONITORING

Station 2 was sampled according to permit specifications. Water samples were collected at depths of 1, 3, and 10 meters. Latitude and longitude were also determined. Temperature and pH readings were taken at depths of 1, 3 and 10 meters. Sea conditions remained the same.

1115 STATION 3 MONITORING

Same as station 2.

1125 STATION 4 MONITORING

Same as station 3. Scum and suspended solids seen at this station during sampling.

1135 STATION 5 MONITORING

Same as station 4. A thin sheen of apparent fish oil smoothed out the leading edge of the plume at this station.

BIOLOGICAL OBSERVATIONS

1115 1 white tern (Gygis alba pacifica) was spotted over the plume.

No mammals or fish observed in the plume during this monitoring trip.

STATIONS POSITIONS AND SAMPLING TIMES

	LATITUDE	LONGITUDE	TIME
Station 1 (control)	14.27.15 south	170.38.9 west	0755
Station 1	14.27.3 south	170.38.0 west	1100
Station 2	14.27.5 south	170.38.2 west	1110
Station 3	14.28.3 south	170.38.3 west	1115
Station 4	14.28.4 south	170.38.5 west	1125
Station 5	14.27.6 south	170.38.6 west	1135

MONITORING TRIP NOVEMBER 9, 1990

Monitoring Vessel:	Tasi II
Discharge Vessel:	M/V Astro
Captain:	Mike Crook
Chief Scientist:	George Scanlan
Starkist Representative:	Helen Tisaloma

Method of Navigation: All fixes obtained by Ball Bearing Hand compass.

INTRODUCTION

On November 9, 1990, the vessel Tasi II transported personnel to an area approximately seven miles south of Pago Pago Harbor, American Samoa for the purpose of monitoring the disposal of cannery generated wastes into the waters of the Pacific Ocean. This monitoring was conducted in compliance with Appendix A, Special Ocean Dumping Permit OD 90-01, Ocean Dump Site Monitoring Plan, included in Ocean Dumping Permit No. OD-90-02-Special. Wind recorded at the harbor at 0635 was at 12mph from the east. Harbor waters was choppy due to wind action.

Chronology of Events:

0635 Departed Pago Pago Harbor and proceeded to dumpsite permit location.

0840 The Tasi II arrived at the dumpsite location, and the station 1(Control) position was established. Water samples were drawn at 1 meter, 3 meters, 10 meters and 20 meters depths. Temperature and pH of the water were taken at depths described above. The wind was blowing at a steady 14mph from the east with periodic surges of 15+ mph. Surface water current follows a westward drift at a measured angle of ~270 degrees. Seas were very rough and choppy with 6-8ft swells. Skies were cloudy with scattered cumulus clouds.

0845 M/V ASTRO BEGINS DUMPING OPERATIONS

The Astro arrived in the area and began dumping operations at station 1. The Astro continued discharging material in a circular pattern downwind, until approximately 1110.

1140 STATION 1 MONITORING

Discrete water samples were taken at depths of 1, 3, 10, and 20 meters. Water temperature and pH were also recorded at the various depths described above. The orientation of the sampling stations from 1 to 5 followed a south south west direction per our visual observations. Water samples were drawn in the relative center of the plume. Sea conditions remained the same. The wind was unchanged.

1147 STATION 2 MONITORING

Station 2 was sampled according to permit specifications. Water samples were collected at depths of 1, 3, and 10 meters. Latitude and longitude were also determined. Temperature and pH readings were taken at depths of 1, 3, 10 and 20 meters. Sea conditions remained the same with high surf topped with breaking crests.

1200 STATION 3 MONITORING

Same as station 2.

1230 STATION 4 MONITORING

Same as station 3.

1245 STATION 5 MONITORING

Same as station 4 per permit specification
Rough sea conditions delayed sampling at various stations.

BIOLOGICAL OBSERVATIONS

1215 Two dolphin fish spotted in the plume.

1240 Two white terns flew over the plume (Gygis alba pacifica)

1245 One brown boobie spotted over the plume.

No mammals were observed in the plume during this monitoring trip.

OCEAN DUMPING RESEARCH PERMIT: OD-90-1
DATA SHEET

DATE: 11/9/90
SEA CONDITION: VERY ROUGH in 6-8ft SWELLS WIND: 14+ Mph EAST

STATION:	DEPTH	TEMP.	PH	ODOR	COLOR	TIME
1 CONTROL	1	81°F	8.00	—	DEEP BLUE	0840
	3	"	8.05			
	10	"	8.07			
	20	"	8.08			
1	1	81°F	8.05	TYPICAL	AQUA	1140
	3	"	8.12	SLUDGE		
	10	"	8.12	ODOR		
	20	"	8.07			
2	1	81°F	8.06	"	AQUA	1147
	3	"	8.10			
	10	"	8.10			
	20	"	8.08			
3	1	81°F	8.10	"	AQUA	1200
	3	"	8.13			
	10	"	8.14			
	20	"	8.16			
4	1	81°F	8.14	"	AQUA	1230
	3	"	8.10			
	10	"	8.13			
	20	"	8.12			
5	1	81°F	8.09	"	AQUA	1245
	3	"	8.14			
	10	"	8.10			
	20	"	8.11			
	SLUDGE		DISPERSED	DUE TO	ROUGH	
	CONDITIONS OF		WATER			

STATION POSITIONS AND SAMPLING TIMES

	LATITUDE	LONGITUDE	TIME
Station 1 (control)	14.24.0 south	170.38.6 west	0480
Station 1	14.25.8 south	170.39.2 west	1140
Station 2	14.26.1 south	170.39.6 west	1147
Station 3	14.26.4 south	170.40.0 west	1200
Station 4	14.26.7 south	170.40.3 west	1230
Station 5	14.27.2 south	170.40.3 west	1245

MONITORING TRIP OCTOBER 26, 1990

Monitoring Vessel:	Tasi II
Discharge Vessel:	M/V Astro
Captain:	Mike Crook
Chief Scientist:	George Scanlan
Starkist Representative:	Helen Tisaloma

Method of Navigation: All fixes obtained by Ball and Bearing Hand Compass.

INTRODUCTION

On October 26, 1990, the vessel Tasi II transported personnel to an area opproximately seven miles south of Pago Pago Harbor, American Samoa for the purpose of monitoring the disposal of cannery generated wastes into the waters of the Pacific Ocean. This monitoring was conducted in compliance with Appendix A, Special Ocean Dumping Permit No. OD-90-02 Special.

Chronology of Events:

0625 Departed Pago Pago Harbor and proceeded to dumpsite permit location. Wind recorded at the harbor at 6:00am was 9mph from Southeast. Skies were cloudy. Harbor waters remained calm.

1111 The Tasi II arrived on the dumpsite location, and station 1(control) position was established. Water samples were taken at 1 meter, 3 meters and 10 meters depths. Wind was blowing at 8mph with periodic surges of up to 14mph from Southeast. Prevailing surface currents followed the wind direction setting West. Seas were choppy with 3-4ft swells. Observed small flock of birds of mixed species at station 1.

M/V ASTRO BEGINS DUMPING OPERATIONS

1120 The Astro arrived in the area and began dumping operations at Station 1. The Astro continued discharging material in a circular pattern until approximately 1350.

STATION 1 MONITORING

1400 Discrete water samples were taken at depths of 1, 3, and 10 meters. Water temperature and pH were also recorded at depths described above. Station 1 was sampled after dumping operations ceased. Water samples were drawn in the relative center of the discharged plume at station sampled. Sea conditions remained unchanged. Wind was also unchanged. Patches of scum observed near the NE edge of the plume.

STATION 2 MONITORING

1405 Station 2 was sampled following sampling at station 1. The monitoring vessel was repositioned to assure samples were taken at the relative center of the discharged plume. Water samples were collected at depths of 1, 3 and 10 meters. Temperatures and pH were also recorded at each depths described. Sea conditions remained the same.

STATION 3 MONITORING

1410 Same as station 2 per permit specifications.

STATION 4 MONITORING

1417 Same as station 2.

STATION 5 MONITORING

1424 Same as station 2. Sea conditions remained unchanged. Wind was also unchanged.

BIOLOGICAL OBSERVATIONS

1111 Small flock of birds of mixed species(terns and boobies) approximately 6 total at station 1.

1328 3 white terns(Gygis alba pacifica) spotted at dumpsite.

1400 Bird activity observed about .25 miles east of plume parallel dumpsite.

1425 Active Tuna school moving aroung north to east parameters of plume. Large flock of seabirds of mixed species(terns, boobies and gulls) feeding overhead.

STATION POSITIONS AND SAMPLING TIME

		LATITUDE	LONGITUDE	TIME
Station 1	Control	14.26.8 south	170.38.0 west	1111
Station 1		14.25.5 south	170.38.0 west	1400
Station 2		14.26.7 south	170.38.2 west	1405
Station 3		14.26.7 south	170.38.2 west	1410
Station 4		14.26.6 south	170.39.0 west	1417
Station 5		14.26.8 south	170.39.3 west	1424

OCEAN DUMPING RESEARCH PERMIT: OD-90-1
DATA SHEET

DATE: 10/26/90
SEA CONDITION: CHOPPY WIND: VARIABLE 8-13mph SE

STATION:	DEPTH	TEMP.	PH	ODOR	COLOR	TIME
1 CONTROL	1	84°F	8.40	—	DEEP BLUE	1111
	3	84°F	8.39			
	10	84°F	8.39			
1	1	84°F	8.30	PUNGENT	AQUA	1400
	3	84°F	8.35	FISHY ODOR		
	10	84°F	8.37			
2	1	84°F	8.31	"	AQUA	1405
	3	84°F	8.34			
	10	84°F	8.36			
3	1	84°F	8.30	"	AQUA	1410
	3	84°F	8.34			
	10	84°F	8.36			
4	1	84°F	8.31	"	AQUA	1417
	3	84°F	8.34			
	10	84°F	8.37			
5	1	84°F	8.29	"	AQUA	1424
	3	84°F	8.33			
	10	84°F	8.35			

STARKIST SAMOA
DATE 10/4/90
TO Simon Wei
FAX # 213-590-3882
FROM Helena Tisalona
FAX # (684) 644-1650
TRANSMISSION # 1068
NO. OF PAGES 4

MONITORING TRIP SEPTEMBER 13, 1990

Monitoring Vessel:	Tasi II
Discharge Vessel:	M/V Astro
Captain:	Mike Crook
Chief Scientist:	George Scanlan
Starkist Representative:	Helen Tisalona

Method of Navigation: All fixes obtained by Ball Bearing Hand compass.

INTRODUCTION

On September 13, 1990, the vessel Tasi II transported personnel to an area approximately seven miles south of Pago Pago Harbor, American Samoa for the purpose of monitoring the disposal of cannery generated wastes into the waters of the Pacific Ocean. This monitoring was conducted in compliance with Appendix A, Special Ocean Dumping Permit OD 90-01, Ocean Dump Site Monitoring Plan, included in Ocean Dumping Permit No. OD-90-02-Special, effective July 31.

Chronology of Events:

0625 Departed Pago Pago Harbor and proceeded to dumpsite permit location.

0820 The Tasi II arrived at the dumpsite location, and the station 1(Control) position was established. Water samples were drawn at 1 meter, 3 meters and 10 meters depths. The wind was blowing from the East at 7mph. Temperature and pH of the water were taken at depths described above. The sea was relatively calm with 2-3ft swells. A drift test was conducted for about 22 minutes to establish surface current direction. Sunny skies dominate most of the monitoring hours, although there were scattered clouds in the sky. Longitudes, latitudes and times for station samplings are summarized in Attachment I.

0830 M/V ASTRO BEGINS DUMPING OPERATIONS

The Astro arrived in the area and began dumping operations at station 1. The Astro continued discharging material in a circular pattern until approximately 1115.

1125 STATION 1 MONITORING

The orientation of the sampling stations from 1 to 5 followed a south east direction based on our visual judgement, with Station 1 being most inshore and Station 5(nearest leading edge of plume) being most offshore. Discrete water samples were taken at depths of 1, 3, and 10 meters at each sampling station. Water temperature and pH were taken from the collected samples. Station 1 was sampled after dumping operations were completed. All water samples were drawn in the relative center of the plume. A thin sheen of fish oil was noted on the inshore end of the plume. The typical foul odor and aqua color of the sludge were noticeable. The wind was unchanged since first taken at the control position.

1140 STATION 2 MONITORING

Station 2 was sampled immediately following Station 1. Water samples were collected at depths of 1, 3, and 10 meters. Latitude and longitude were also determined. Temperature and pH readings were taken at depths of 1, 3, and 10 meters. The monitoring vessel was repositioned the relative center of the plume before water samples were drawn.

1147 STATION 3 MONITORING

Same as station 2.

1152 STATION 4 MONITORING

Same as station 3. One white tern observed during sampling at this station.

1200 STATION 5 MONITORING

Same as station 4.

BIOLOGICAL OBSERVATIONS

1125 One white tern (Gygis alba pacifica) flew over the plume.

1140 One black gull and one white tern were spotted over the plume.

No mammals were observed in the plume during this monitoring trip.

Attachment I

MONITORING TRIP OF SEPTEMBER 13, 1990

STATION POSITIONS AND SAMPLING TIMES

	LATITUDE	LONGITUDE	TIME
Station 1(control)	14.23.0 south	170.38.1 west	0820
Drift Station	14.23.9 south	170.38.3 west	0842
Station 1	14.23.8 south	170.38.4 west	1125
Station 2	14.24.4 south	170.38.1 west	1140
Station 3	14.24.5 south	170.37.7 west	1147
Station 4	14.25.0 south	170.38.3 west	1152
Station 5	14.25.4 south	170.37.6 west	1200

Attachment II

OCEAN DUMPING RESEARCH PERMIT: OD-90-1
DATA SHEET

DATE: September 13, 1990

SEA CONDITION: Calm WIND: 7mph East

STATION #	DEPTH	TEMP.	PH	ODOR	COLOR	TIME
1 Control	1	82°F	8.41	~~BAD~~ NONE	NORMAL	8:20Am
	3	✓	8.38		DEEP BLUE	
	10	✓	8.49			
1	1	82°F	8.35	BAD	AQUA	11:25Am
	3	✓	8.36			
	10	✓	8.36			
2	1	82°F	8.35	BAD	AQUA	11:40Am
	3	✓	8.36			
	10	✓	8.38			
3	1	82°F	8.35	BAD	AQUA	11:47Am
	3	✓	8.36			
	10	✓	8.37			
4	1	82°F	8.34	BAD	AQUA	11:52Am
	3	✓	8.34			
	10	✓	8.35			
5	1	82°F	8.36	BAD	AQUA	12:00Pm
	3	✓	8.37			
	10	✓	8.38			
	* THIN SHEEN FISH OIL SEEN IN PLUME					

(INSIDE PLUME AT STATION 1 SAMPLING).

MONITORING TRIP AUGUST 23, 1990

Monitoring Vessel:	Tasi II
Discharge Vessel:	M/V Astro
Captain:	Mike Crook
Chief Scientist:	George Scanlan
Starkist Representative:	Helen Tisaloma

Method of Navigation: All fixes obtained by Ball Bearing Hand compass.

INTRODUCTION

On August 23, 1990, the vessel Tasi II transported personnel to an area approximately seven miles south of Pago Pago Harbor, American Samoa for the purpose of monitoring the disposal of cannery generated wastes into the waters of the Pacific Ocean. This monitoring was conducted in compliance with Appendix A, Special Ocean Dumping Permit OD 90-01, Ocean Dump Site Monitoring Plan, included in Ocean Dumping Permit No. OD-90-02-Special, effective July 31. This is the first actual monitoring trip for the new disposal vessel, MV Astro, during sludge dumping operations at the new dumpsite.

Chronology of Events:

0618 Departed Pago Pago Harbor and proceeded to dumpsite permit location.

0800 The Tasi II arrived at the dumpsite location, and the station 1(Control) position was established. Water samples were drawn at 1 meter, 3 meters and 10 meters depths. The wind was blowing from the East at 13mph. Surface water current follows a westward drift due to the direction of the wind. Temperature and pH of the water were taken at depths described above. The sea was choppy with 3-4ft swells. Skies were cloudy with scattered cumulus clouds.

0830 M/V ASTRO BEGINS DUMPING OPERATIONS

The Astro arrived in the area and began dumping operations at station 1. The Astro continued discharging material in a circular pattern downwind, until approximately 1155.

cc: M. Callaghan
R. Fleming
B. Higgins
N. Wei
K. Miller

1155 STATION 1 MONITORING

Discrete water samples were taken at depths of 1, 3, and 10 meters. Water temperature and pH were also taken from the collected samples. Station 1 was sampled after dumping operations were completed, 3 hours and 25 minutes later. The orientation of the sampling stations from 1 to 5 followed a downwind direction with station 5 ("leading edge") being the last station sampled minutes after the disposal vessel departed the dumpsite. All water samples were drawn in the relative center of the plume. Sea conditions remained the same. The wind was unchanged.

1205 STATION 2 MONITORING

Station 2 was sampled according to permit specifications. Water samples were collected at depths of 1, 3, and 10 meters. Latitude and longitude were also determined. Temperature and pH readings were taken at depths of 1, 3, and 10 meters.

1210 STATION 3 MONITORING

Same as station 2 per permit specifications.

1230 STATION 4 MONITORING

Same as station 3 per permit specifications. One white tern observed during sampling at this station.

1235 STATION 5 MONITORING

Same as station 4 per permit specification

BIOLOGICAL OBSERVATIONS

1230 One white tern flew over the plume (Gygis alba pacifica)

No mammals were observed in the plume during this monitoring trip.

STATION POSITIONS AND SAMPLING TIMES

	LATITUDE	LONGITUDE	TIME
Station 1(control)	14.22.3 south	170.38.2 west	0830
Station 1	14.21.3 south	170.27.1 west	1155
Station 2	14.21.8 south	170.36.4 west	1205
Station 3	14.22.5 south	170.38.8 west	1210
Station 4	14.23.0 south	170.38.6 west	1230
Station 5	14.22.8 south	170.29.7 west	1235

OCEAN DUMPING RESEARCH PERMIT: OD-90-1

DATA SHEET

DATE: AUGUST 23, 1990

SEA CONDITION: CHOPPY WIND: 13mph From East

STATION #	DEPTH	TEMP.	PH	ODOR	COLOR	TIME
1 Control	1	81.8°F	8.4	—	DEEP Blue	8:30am.
	3	81.8	8.4			
	10	81.8	8.3			
1	1	82.3	8.5	Light foul	Light blue	11:55am
	3	81.7	8.5	odor		
	10	81.7	8.5			
2	1	81.5	8.5	Light foul	Light blue	12:05pm
	3	81.6	8.5	odor		
	10	81.6	8.4			
3	1	81.3	8.3	Light foul	Light blue	12:10pm
	3	81.7	8.4	odor		
	10	81.7	8.3			
4	1	81.3	8.4	Foul fishy	Light blue	12:30pm
	3	81.7	8.5	odor		
	10	81.7	8.4			
5	1	81.5	8.4	Foul	Light blue	12:35pm.
	3	81.5	8.3		with packets	
	10	81.4	8.4		of brown sludge.	

The following volumes of treatment plant sludge and high strength waste were removed from StarKist Samoa facility, between January 01, 1991 to January 31, 1991. They are reported as required by Paragraph 3.3 - Special Conditions, in Ocean Dumping Permit No. OD-90-01 Special.

DATE	VOLUMES	DATE	VOLUMES
1/02/91	82,700 gals	1/21/91	83,100 gals
1/04/91	21,150 gals	1/22/91	90,400 gals
1/08/91	68,950 gals	1/23/91	90,800 gals
1/09/91	73,600 gals	1/23/91	70,300 gals
1/10/91	53,150 gals	1/24/91	85,050 gals
1/11/91	75,850 gals	1/25/91	94,900 gals
1/14/91	75,600 gals	1/28/91	88,500 gals
1/15/91	89,900 gals	1/29/91	87,300 gals
1/16/91	86,000 gals	1/29/91	88,350 gals
1/17/91	88,700 gals	1/30/91	105,100 gals
1/18/91	84,000 gals	1/30/91	90,050 gals
		1/31/91	64,400 gals
		TOTAL GALLONS	**1,637,850 gals**

The quantity of Alum and coagulant Polymer, added to the Treatment Plant totalled:

Aluminum Sulfate (Alum)	:	**19,699.2 lbs**
Coagulant Polymer	:	**421.6 lbs**

The following results are from analyses conducted to fulfill Special Conditions, Paragraph 3 - Analysis of Waste Material for Ocean Dumping Permit OD-90-01 Special, for the period of January 01, 1991 through January 31, 1991.

DISSOLVED AIR FLOTATION (DAF) SLUDGE, COOKER JUICE AND PRESS LIQUOR

PARAMETER ANALYZED	DAF SLUDGE	STD. MAX	COOKER JUICE	STD. MAX	PRESS LIQUOR	STD. MAX
Total Solids, mg/L.	176,500	230,460	43,500	158,290	207,000	271,920
BOD , mg/L.	136,500	376,520	64,500	365,450	161,500	399,090
Total Phosphorus, mg/L.	609.7	3,050	293.29	1,150	647.7	1,990
Tot. Nit., mg/L.	3,982.7	18,100	3,251	21,380	14,487.3	31,556
Oil & Grease, mg/L.	48,000	129,590	2,990	4,830	50,500	62,150
pH, std. units	6.37	5.5-7.0	6.05	5.5-7.0	6.16	5.5-7.0
Tot. Vol. Solids, mg/L.	150,500	182,210	30,500	146,900	187,000	385,630
Density, g/ml.	1.01	0.92 - 1.07	1.01	0.97 - 1.06	1.015	0.96 - 1.07
Ammonia, mg/L.	1,542.5	7,500	236.5	21,200	360.25	21,170
Aluminum, mg/L.	182.7		1.75		0.8	
Chromium, mg/L.	0.795		0.245		0.225	
Nickel, mg/L.	1.2		0.565		0.525	
Copper,mg/L.	4.355		1.04		1.77	
Lead, mg/L.	0.5		0.2		0.25	
Cadmium, mg/L.	0.535		0.255		0.905	
Mercury,mg/L.	0.0075		<0.005		0.0125	
Tot. Pet. Hydroc.,ug/L.	2,565,000		65,000		680,000	

All parameters reported in January were in compliance with permit limits.

STAR-KIST SAMOA SLUDGE LOADING/DUMPING SCHEDULE FOR VESSEL ASTRO JANUARY 1991

DATE	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	VESSEL LEFT DOCK	VESSEL ARRIVE DUMPSITE	VESSEL DUMPING STARTED	VESSEL DUMPING COMPLETED	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	GALLONS HSW LOADED	GALLONS SLUDGE LOADED	TOTAL GALLONS LOADED
12-30-90	0200	1400									
1-02-91			0710	0836	0845	1215			82700	0	82700
1-04-91	1005	1130	1135	1237	1245	1500				21150	21150
1-07-91							1530	2100			
1-08-91			0750	0905	1000	1325	1505	1800	57200	11750	68950
1-09-91			0910	1036	1045	1420	1830	2115	73600	0	73600
1-10-91			0750	0856	0905	1225	1535	2200	51150	2000	53150
1-11-91			0855	1002	1010	1335			64100	11750	75850
1-13-91							1815	2025			
1-14-91			0750	0856	0905	1215	1800	0320	75600		75600
1-15-91			0820	0931	0940	1300	1610	1800	89900	0	89900
1-16-91	0140	0300	0800	0918	0925	1310	1610	1915	86000	0	86000
1-17-91	0045	0200	0800	0907	0915	1300	1705	1905	88700	0	88700
1-18-91	0725	0820	0820	0930	0940	1310	1800	0025	84000	0	84000
1-21-91			0805	0902	0910	1120	2355	0250	83100	0	83100
1-22-91			0650	0757	0805	1155	1335	1645	90400	0	90400
1-23-91	0230	0400	0550	0645	0655	1015			90800	0	90800
1-23-91	1130	1355	1410	1508	1515	1645	2129	0300	70300	0	70300
1-24-91			0655	0735	0745	1045	1730	2030	45100	39950	85050
1-25-91			0650	0750	0800	1155	1510	1945	85500	9400	94900
1-28-91			0750	0907	0915	1245	1420	1800	88500	0	88500
1-29-91			0610	0707	0715	1030			87300	0	87300
1-29-91	1135	1335	1345	1437	1445	1635	1800	2020	67200	21150	88350
1-30-91	0415	0540	0605	0713	0720	1025			105100	0	105100
1-30-91	1140	1330	1415	1507	1515	1715	2240	0135	54800	35250	90050
1-31-91			0900	1011	1020	1415			64400	0	64400
TOTAL GALS									1685450	152400	1837850

The following volumes of treatment plant sludge and high strength waste were removed from StarKist Samoa facility, between December 01, 1990 to December 31,1990. They are reported as required by Paragraph 3.3-Special Conditions, in Ocean Dumping Permit No. OD-90-01 Special.

DATE	VOLUMES	DATE	VOLUMES
12/03/90	58,400 gals	12/14/90	77,850 gals
12/04/90	73,800 gals	12/15/90	77,300 gals
12/05/90	81,400 gals	12/17/90	68,550 gals
12/06/90	73,800 gals	12/18/90	64,900 gals
12/07/90	69,600 gals	12/19/90	67,650 gals
12/10/90	60,700 gals	12/20/90	77,100 gals
12/11/90	73,850 gals	12/21/90	73,400 gals
12/11/90	53,000 gals	12/26/90	68,000 gals
12/12/90	77,900 gals	12/27/90	71,100 gals
12/12/90	66,600 gals	12/27/90	46,000 gals
12/13/90	74,800 gals	12/28/90	34,200 gals
		TOTAL GALLONS	**1,489,900 gals**

The quantity of Alum and coagulant Polymer, added to the Treatment Plant totalled :

Aluminum Sulfate (Alum)	:	18,652.8 lbs
Coagulant Polymer	:	404.8 lbs

The following results are from analyses conducted to fulfill Special Conditions, Paragraph 3 - Analysis of Waste Material for Ocean Dumping Permit OD-90-01 Special, for the period of December 01,1990 through December 31, 1990.

DISSOLVED AIR FLOTATION (DAF) SLUDGE, COOKER JUICE AND PRESS LIQUOR

PARAMETER ANALYZED	DAF SLUDGE	STD. MAX	COOKER JUICE	STD. MAX	PRESS LIQUOR	STD. MAX
Total Solids, mg/L.	118,000	230,460	42,000	158,290	205,000	271,920
BOD , mg/L.	62,000	376,520	47,000	365,450	143,000	399,090
Tot. Phosphorus, mg/L.	949.8	3,050	802.2	1,150	1,257.3	1,990
Tot. Nit., mg/L.	2,567	18,100	4,300	21,380	9,650	31,550
Oil & Grease, mg/L.	59,000	129,590	<500	4,830	54,000	62,150
pH std. units	6.39	5.5-7.0	6.08	5.5-7.0	6.28	5.5-7.0
Tot. Vol. Solids, mg/L.	88,000	182,210	28,000	146,900	184,000	385,630
Density, g/ml.	1.00	0.92 - 1.07	1.00	0.97 - 1.06	1.04	0.96 - 1.07
Ammonia, mg/L.	2,120	7,500	405.5	21,200	564.5	21,170
Aluminum, mg/L.	562.0		< 0.5		1.9	
Chromium, mg/L.	1.30		0.18		0.20	
Nickel, mg/L.	1.7		0.5		0.43	
Copper,mg/L.	4.53		0.51		1.04	
Lead, mg/L.	1.9		0.1		0.39	
Cadmium, mg/L.	0.57		0.21		0.60	
Mercury,mg/L.	0.009		< 0.005		0.013	
Tot. Pet. Hydroc.,ug/L.	7,000,000		< 40,000		710,000	

All parameters reported in December were in compliance with permit limits.

STAR-KIST SAMOA SLUDGE LOADING/DUMPING SCHEDULE FOR VESSEL ASTRO DECEMBER 1990

DATE	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	VESSEL LEFT DOCK	VESSEL ARRIVE DUMPSITE	VESSEL DUMPING STARTED	VESSEL DUMPING COMPLETED	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	GALLONS HSW LOADED	GALLONS SLUDGE LOADED	TOTAL GALLONS LOADED
12-02-90							1620	1805			
12-03-90			0545	0651	0700	0930	2210	0215	58400	0	58400
12-04-90			0740	0856	0905	1155	1940	2230	39300	34500	73800
12-05-90			0540	0654	0715	1020	1740	2015	81400	0	81400
12-06-90			0730	0849	0900	1140	1545	1800	73800	0	73800
12-07-90			0730	0849	0900	1130			69600	0	69600
12-09-90	0915	1138									
12-10-90			0755	0900	0910	1155	1745	2150	60700	0	60700
12-11-90			0740	0847	0855	1055			24500	49350	73850
12-11-90	1235	1415	1420	1517	1525	1645	1815	2100	53000	0	53000
12-12-90			0530	0637	0645	0935			77900	0	77900
12-12-90	1100	1310	1320	1418	1425	1535	1800	2230	66600	0	66600
12-13-90	0330	0430	0535	0640	0650	0955	1600	1920	65400	9400	74800
12-14-90			0600	0756	0805	1100	1800	2040	52000	25850	77850
12-15-90			0710	0818	0825	1140	1710	1930	77300	0	77300
12-17-90			0535	0652	0700	0935	1845	2100	42700	25850	68550
12-18-90			0720	0843	0850	1145	1630	0009	64900	0	64900
12-19-90			0720	0847	0855	1200	1645	1930	55900	11750	67650
12-20-90			0720	0851	0900	1215	1350	1645	77100	0	77100
12-21-90			0640	0803	0810	1135	1720	2000	73400	0	73400
12-26-90			0750	0907	0915	1200	1315	1505	68000	0	68000
12-27-90			0530	0642	0650	0840			71100	0	71100
12-27-90	1000	1130	1200	1308	1315	1425			46000	0	46000
12-28-90	0705	0945	1120	1240	1250	1515			34200	0	34200
TOTAL GALS									1333200	156700	1489900

The following volumes of treatment plant sludge and high strength waste were removed from StarKist Samoa facility, between November 01, 1990 to November 30, 1990. They are reported as required by Paragraph 3.3 - Special Conditions, in Ocean Dumping Permit No. OD-90-01 Special.

DATE	VOLUMES	DATE	VOLUMES
11/01/90	70,600 gals	11/16/90	70,300 gals
11/02/90	74,800 gals	11/19/90	80,400 gals
11/05/90	67,800 gals	11/20/90	69,300 gals
11/06/90	72,800 gals	11/21/90	61,600 gals
11/07/90	69,550 gals	11/22/90	74,425 gals
11/08/90	75,200 gals	11/26/90	65,650 gals
11/09/90	77,100 gals	11/27/90	68,400 gals
11/10/90	69,100 gals	11/28/90	35,900 gals
11/13/90	70,450 gals	11/29/90	47,000 gals
11/14/90	72,000 GALS	11/29/90	47,800 gals
11/15/90	70,200 gals	11/30/90	62,200 gals
11/15/90	48,300 gals		

The quantity of Alum and coagulant Polymer, added to the Treatment Plant totalled:

Aluminum Sulfate (Alum)	:	25,152 lbs
Coagulant Polymer	:	543.6 lbs

The following results are from analyses conducted to fulfill Special Conditions, Paragraph 3 - Analysis of Waste Material for Ocean Dumping Permit OD-90-01 Special, for the period of November 01,1990 through November 30, 1990.

DISSOLVED AIR FLOTATION (DAF) SLUDGE, COOKER JUICE AND PRESS LIQUOR

PARAMETER ANALYZED	DAF SLUDGE	STD. MAX	COOKER JUICE	STD. MAX	PRESS LIQUOR	STD. MAX
Total Solids, mg/L.	60,000	230,460	66,000	158,290	200,000	271,920
BOD , mg/L.	73,500	376,520	56,000	365,450	158,500	399,090
Tot. Phosphorus, mg/L.	1,513.0	3,050	824.0	1,150	1,105.0	1,990
Tot. Nit., mg/L.	500	18,100	4,700	21,380	8,800	31,550
Oil & Grease, mg/L.	24,000	129,590	1,300	4,830	89,000	62,150
pH std. units	5.75	5.5-7.0	5.98	5.5-7.0	6.25	5.5-7.0
Tot. Vol. Solids, mg/L.	34,000	182,210	49,000	146,900	180,000	385,630
Density, g/ml.	1.02	0.92 - 1.07	1.03	0.97 - 1.06	1.03	0.96 - 1.07
Ammonia, mg/L.	246.5	7,500	237.5	21,200	360	21,170
Aluminum, mg/L.	37.9		0.6		0.8	
Chromium, mg/L.	0.22		0.04		0.06	
Nickel, mg/L.	0.6		0.3		0.2	
Copper, mg/L.	2.98		0.56		1.01	
Lead, mg/L.	0.6		0.1		0.4	
Cadmium, mg/L.	0.10		0.32		0.83	
Mercury, mg/L.	<0.005		< 0.005		0.02	
Tot. Pet. Hydroc., ug/L.	1,700,000		56,000		1,400,000	

Parameters reported in November were in compliance with permit limits, except the Press Liquor oil & grease.

STAR-KIST SAMOA SLUDGE LOADING/DUMPING SCHEDULE FOR VESSEL ASTRO FOR NOVEMBER, 1990

DATE	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	VESSEL LEFT DOCK	VESSEL ARRIVE DUMPSITE	VESSEL DUMPING STARTED	VESSEL DUMPING COMPLETED	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	GALLONS HSW LOADED	GALLONS SLUDGE LOADED	TOTAL GALLONS LOADED
11-01-90			0600	0703	0710	0930	1710	2040	70600	0	70600
11-02-90			0540	0659	0735	1005	1430	1655	51300	23500	74800
11-05-90			0720	0840	0850	1150	1605	1940	67800	0	67800
11-06-90			0600	0707	0715	0945	1750	2200	49300	23500	72800
11-07-90			0550	0654	0700	0925	2130	0055	21800	47750	69550
11-08-90			0542	0652	0700	0925	2130	2255	75200	0	75200
11-09-90	0025	0235	0720	0834	0845	1110	1620	1850	53600	23500	77100
11-10-90			0650	0841	0850	1110			69100	0	69100
11-12-90			NO TRIP				1845	2215			
11-13-90			0715	0927	0935	1210	1405	1740	44600	25850	70450
11-14-90			0540	0638	0645	0920	2135	0050	72000	0	72000
11-15-90			0550	0641	0650	0910			70200	0	70200
11-15-90	1045	1300	1345	1437	1445	1650	1935	2305	48300	0	48300
11-16-90	0100	0210	0755	0914	0923	1125			23300	47000	70300
11-17-90			NO TRIP				1320	1600			
11-19-90			0715	0830	0840	1120	1638	2045	80400	0	80400
11-20-90			0735	0847	0855	1215	1720	2030	69300	0	69300
11-21-90			0745	0849	0900	1130	1725	0210	61600	0	61600
11-22-90			0930	1239	1250	1525			56800	17625	74425
11-25-90			NO TRIP				1325	1830			
11-26-90			0740	0850	0900	1120	1800	0530	30400	35250	65650
11-27-90			0735	0830	0840	1145	1848	2000	63400	0	63400
11-28-90			0715	0808	0815	1145	1810	2030	35900	0	35900
11-29-90			0545	0636	0645	0905			47000	0	47000
11-29-90	1045	1240	1255	1353	1400	1510	1955	0030	47800	0	47800
11-30-90			0753	0826	0835	1145			48100	14100	62200
TOTAL GALLONS									257800	258075	1515

The following volumes of treatment plant sludge and high strength waste were removed from StarKist Samoa facility, between October 1, 1990 to October 31,1990. They are reported as required by Paragraph 3.3-Special Conditions, in Ocean Dumping Permit No. OD-90-01 Special.

DATE	VOLUMES	DATE	VOLUMES
10/01/90	75,800 gals	10/19/90	73,800 gals
10/02/90	71,300 gals	10/20/90	76,400 gals
10/03/90	55,100 gals	10/21/90	62,400 gals
10/05/90	43,000 gals	10/22/90	46,500 gals
10/06/90	78,800 gals	10/23/90	54,150 gals
10/08/90	63,200 gals	10/24/90	64,800 gals
10/09/90	30,600 gals	10/25/90	63,100 gals
10/10/90	23,200 gals	10/26/90	69,650 gals
10/11/90	71,800 gals	10/29/90	65,600 gals
10/12/90	36,250 gals	10/30/90	69,500 gals
10/14/90	50,700 gals	10/31/90	74,900 gals

The quantity of Alum and coagulant Polymer, added to the Treatment Plant totalled :

Aluminum Sulfate (Alum)	:	23,894.6 lbs
Coagulant Polymer	:	518.8

The following results are from analyses conducted to fulfill Special Conditions, Paragraph 3 - Analysis of Waste Material for Ocean Dumping Permit 00-90-01 Special, for the period of October 1,1990 through October 31, 1990.

DISSOLVED AIR FLOTATION (DAF) SLUDGE, COOKER JUICE AND PRESS LIQUOR

PARAMETER ANALYZED	DAF SLUDGE	STD. MAX	COOKER JUICE	STD. MAX	PRESS LIQUOR	STD. MAX
Total Solids, mg/L.	44,000	230,460	56,000	158,290	245,000	271,920
BOD , mg/L.	121,500	376,520	69,000	365,450	157,500	399,090
Tot. Phosphorus, mg/L.	526.8	3,050	530.4	1,150	654.3	1,990
Tot. Nit., mg/L.	2,100	18,100	4,300	21,380	10,000	31,550
Oil & Grease, mg/L.	13,000	129,590	960	4,830	83,000	62,150
pH at 1. units	6.07	5.5-7.0	6.30	5.5-7.0	6.28	5.5-7.0
Tot. Vol. Solids, mg/L.	23,000	182,210	41,000	146,900	230,000	385,630
Density, g/ml.	1.03	0.92 - 1.07	1.02	0.97 - 1.06	0.94	0.96 - 1.07
Ammonia, mg/L.	3,200	7,500	3,850	21,200	3,050	21,170
Aluminum, mg/L.	208.5		1.1		1.1	
Chromium, mg/L.	0.88		0.28		0.16	
Nickel, mg/L.	0.7		0.5		0.6	
Copper, mg/L.	1.81		0.28		0.74	
Lead, mg/L.	0.8		0.2		0.4	
Cadmium, mg/L.	0.15		0.22		0.6	
Mercury, mg/L.	0.005		0.005		0.015	
Tot. Pet. Hydroc., ug/L.	1,300,000		< 30,000		1,600,000	

All parameters reported in October were in compliance with permit limits, except the Press Liquor oil & grease and density.

STAR-KIST SAMOA SLUDGE LOADING/DUMPING SCHEDULE FOR VESSEL ASTRO FOR OCTOBER '90

DATE	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	VESSEL LEFT DOCK	VESSEL ARRIVE DUMPSITE	VESSEL DUMPING STARTED	VESSEL DUMPING COMPLETED	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	GALLONS HSW LOADED	GALLONS SLUDGE LOADED	TOTAL GALLONS LOADED
10-[illegible]-90	0515	0600	0630	0947	1028	1315	2330	0245	75800	0	75800
10-[illegible]-90	0015	0300	0600	0920	0935	1241			43100	28200	71300
10-03-90	0340	0630	0815	0923	0930	1215			55100	0	55100
10-04-90	0735	0930	NO TRIP								
10-05-90			0810	0904	0910	1140	1750	2145	43000	0	43000
10-06-90			0750	0852	0900	1130	1815	2035	36500	42300	78800
10-08-90			0848	0956	1005	1232			63200	0	63200
10-09-90	0530	0655	1015	1131	1140	1415			21000	9600	30600
10-10-90	0820	0905	0915	1050	1100	1245	1940	2230	23200	0	23200
10-11-90			0700	0930	0940	1300			71800	0	71800
10-12-90	1035	1250	1310	1448	1500	1650	1700	1845	19800	16450	36250
10-14-90			0816	0923	0935	1220			50700	0	50700
10-16-90			NO TRIP				1800	2100			
10-19-90			0710	0818	0830	1100	1530	1815	73800	0	73800
10-20-90			0736	0834	0840	1120	1535	2030	76400	0	76400
10-21-90			0715	0822	0830	1055	1730	1925	0	62400	62400
10-22-90			0706	0824	0830	1100	1530	1855	48500	0	48500
10-23-90			0730	0849	0855	1120	1820	2135	37700	16450	54150
10-24-90			0745	0850	0855	1130	1720	2110	64800	0	64800
10-[illegible]-90			0746	0856	0905	1145	1705	2105	63100	0	63100
10-26-90			1000	1108	1115	1350			48500	21150	69650
10-27-90	0610	0920	NO TRIP								
10-29-90			0740	0844	0850	1130			65600	0	65600
10-30-90	0030	0420	0600	0710	0715	0935	1605	0045	22900	47000	69900
10-31-90			0650	0801	0810	1036	1810	2040	74900	0	74900
TOTAL GALLONS									1079000	243550	1322550

The following volumes of treatment plant sludge and high strength waste were removed from StarKist Samoa facility, between September 1, 1990 to September 30,1990. They are reported as required by Paragraph 3.3-Special Conditions, in Ocean Dumping Permit No. OD-90-01 Special.

DATE	VOLUMES	DATE	VOLUMES
09/04/90	73,100 gals	09/19/90	68,200 gals
09/05/90	67,600 gals	09/20/90	67,000 gals
09/06/90	68,000 gals	09/21/90	71,700 gals
09/07/90	69,500 gals	09/24/90	58,800 gals
09/08/90	73,300 gals	09/25/90	75,000 gals
09/12/90	61,430 gals	09/26/90	55,400 gals
09/13/90	83,150 gals	09/27/90	63,500 gals
09/14/90	70,600 gals	09/28/90	72,700 gals
09/15/90	67,400 gals	09/29/90	76,500 gals
09/18/90	74,100 gals		

The quantity of Alum and coagulant Polymer, added to the Treatment Plant totalled :

Aluminum Sulfate (Alum)	:	20,572.8 lbs
Coagulant Polymer	:	444.9 lbs

The following results are from analyses conducted to fulfill Special Conditions, Paragraph 3 - Analysis of Waste Material for Ocean Dumping Permit DD-90-01 Special, for the period of September 1, 1990 through September 30, 1990

DISSOLVED AIR FLOTATION (DAF) SLUDGE, COOKER JUICE AND PRESS LIQUOR

PARAMETER ANALYZED	DAF SLUDGE	STD. MAX	COOKER JUICE	STD. MAX	PRESS LIQUOR	STD. MAX
Total Solids, mg/L.	117,000	230,460	34,000	158,290	260,000	271,920
BOD , mg/L.	185,000	376,520	107,500	365,450	189,000	399,090
Tot. Phosphorus, mg/L.	1,467.6	3,050	429.6	1,150	2,242	1,990
Tot. Nit., mg/L.	6,600	18,100	4,000	21,380	12,400	31,550
Oil & Grease, mg/L.	32,000	129,590	2,500	4,830	120,000	62,150
pH std. units	5.66	5.5-7.0	6.26	5.5-7.0	6.08	5.5-7.0
Tot. Vol. Solids, mg/L.	90,000	182,210	25,000	146,900	244,000	385,630
Density, g/ml.	1.02	0.92 - 1.07	1.00	0.97 - 1.06	1.03	0.96 - 1.07
Ammonia, mg/L.	5,485	7,500	1,695	21,200	3,845	21,170
Aluminum, mg/L.	106.6		1.1		2.1	
Chromium, mg/L.	1.25		0.38		0.15	
Nickel, mg/L.	1.0		< 0.1		0.7	
Copper, mg/L.	4.05		0.40		0.80	
Lead, mg/L.	2.1		0.3		0.6	
Cadmium, mg/L.	0.28		0.16		0.54	
Mercury, mg/L.	0.008		0.007		0.030	
Tot. Pet. Hydroc., ug/L.	3,000,000		< 60,000		2,000,000	

All parameters reported in September were in compliance with the permit limits, except the press liquor oil & grease and total phosphorus.

Sincerely,

STAR-KIST SAMOA SLUDGE LOADING/DUMPING SCHEDULE FOR VESSEL ASTRO FOR SEPTEMBER '90

DATE	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	VESSEL LEFT DOCK	VESSEL ARRIVE DUMPSITE	VESSEL DUMPING STARTED	VESSEL DUMPING COMPLETED	VESSEL STARTED LOADING	VESSEL LOADING COMPLETED	GALLONS HSW LOADED	GALLONS SLUDGE LOADED	TOTAL GALLONS LOADED
9/04/90-TUE			08:20	09:37	09:48	12:52	23:20	02:50	73100	0	73100
9/05/90-WED	07:00	07:30	08:25	09:46	09:55	12:45	18:50	20:55	67600	0	67600
9/06/90-THU	05:25	06:40	08:30	09:44	09:50	12:30	18:25	20:20	68000	0	68000
9/07/90-FRI			07:50	09:05	09:12	11:50	17:30	20:12	69500	0	69500
9/08/90-SAT	06:00	08:45	08:50	10:07	10:18	13:40	18:50	21:45	16900	56400	73300
9/12/90-WED	02:45	03:00	07:50	09:00	09:10	11:38	20:30	23:00	61430	0	61430
9/13/90-THU	00:06	01:50	06:50	08:14	08:24	11:15	17:45	19:30	57300	25850	83150
9/14/90-FRI	04:40	06:15	07:55	09:07	09:15	11:48	19:00	20:15	70600	0	70600
9/15/90-SAT	01:30	06:25	08:20	09:31	09:40	12:05	21:30	22:50	67400	0	67400
9/18/90-TUE			08:10	09:12	09:21	12:00	13:15	16:30	74100	0	74100
9/19/90-WED			07:45	08:55	09:05	11:30	23:45	03:40	68200	0	68200
9/20/90-THU			07:40	09:27	09:35	12:00	19:40	23:25	67000	0	67000
9/21/90-FRI	01:15	02:15	08:00	09:12	09:18	12:24	20:30	23:15	71700	0	71700
9/24/90-MON	07:45	12:00	12:25	13:41	13:48	15:30			10800	48000	58800
9/25/90-TUE	07:00	07:15	08:30	09:41	09:48	12:20			75000	0	75000
9/26/90-WED			08:15	09:33	09:38	12:00	21:26	00:50	55400	0	55400
9/27/90-THU			10:22	11:35	11:40	14:00	22:30	02:00	63500	0	63500
9/28/90-FRI	06:30	05:45	08:12	09:24	09:30	12:15			72700	0	72700
9/29/90-SAT	02:15	05:50	07:30	10:03	10:10	12:50	21:30	02:40	48300	28200	76500
TOTAL GALLONS									1158530	158450	1316980

StarKist Samoa, Inc.

February 10, 1992

OPINAP (E-4)
U. S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of StarKist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease and total phosphorus permitted maximum concentration was exceeded during the month of December, 1991 for cooker and press liquor.

The oil and grease concentration of the cooker juice was 13,400 mg/l. The total phosphorus concentration of the press liquor was 2,180 mg/l. The permitted concentration is 4,830 mg/l and 1,990 respectively.

All other permitted concentrations were met.

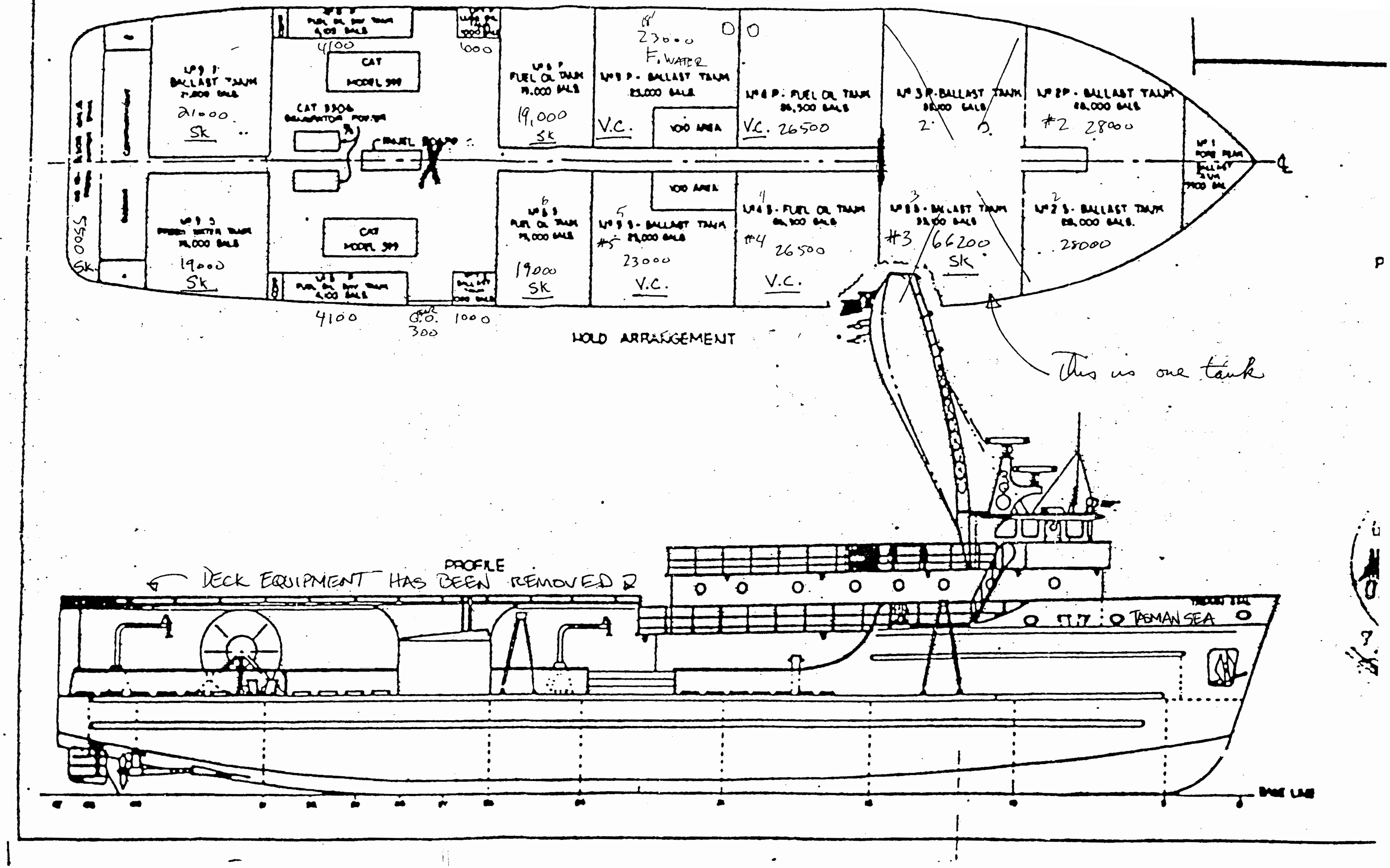
Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/tl

cc: W. Adams
R. Higgins
R. Ward
N. Wei


HOLD ARRANGEMENT
This is one tank
PROFILE
DECK EQUIPMENT HAS BEEN REMOVED
TASMAN SEA
BASE LINE

TASMAN SEA

rec 5/3/93
Copy to Cotter
M. Lee

StarKist Seafood Company

180 East Ocean Boulevard
Long Beach, California 90802-4797
Telephone: 213-590-9900

An Affiliate of H.J. Heinz Company

Heinz

28 April, 1993

The Regional Administrator
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Sir:

Subject: **Intent to Change the Designated Waste Transporter under Ocean Dumping Permit OD 90-01 Special**

Pursuant to General Condition 1.8 of the above referenced Ocean Dumping Permit, notice is hereby given that StarKist Samoa Inc. intends to change the designated waste transporter form Pago Marine, Inc. to Blue North Fisheries.

It is proposed that a new vessel named "Blue North" will take over ocean dumping operation on or about May 30, 1993. The exact date will depend on the exact arrival time of the vessel at Pago Pago Harbor, estimated to be the end of May 1993. It is our intent to place the "Blue North" in service soon as possible upon arrival.

The dimensions of the vessel "Blue North" are: Length 155 feet, width 38 feet and height 13.5 feet. These dimensions fall within the range of vessels modelled in the computer study of March 1990.

It is also the intent of the cannery to use this new vessel for the new ocean dumping permit for which an application was submitted on December 8th, 1992.

If there are any questions, please contact me at (310) 590-3873.

Sincerely,

Norman S. Wei
Senior Manager
Environmental Engineering

cc: M. Callaghan - StarKist Samoa

McGhee

Post-It™ brand fax transmittal memo 7671	# of pages ▸ 1
To Pat Young	From Norman Wei
Co. (E-4)	Co.
Dept.	Phone #
Fax #	Fax #

StarKist Seafood Company

Memorandum

DATE: 27 April, 1993

TO: Russell Riddell

FROM: Norman Wei

SUBJECT: Processing of High Strength Wastes through the DAF

I have obtained special permission from Pat Young of the US EPA office in San Francisco for StarKist Samoa to process no more than 150,000 gallons of high strength waste through the DAF treatment plant for today only.

I would like you to treat today as a sampling day for the purpose of your NPDES permit. Please ask Helen to increase the alum dosage by at least 20 percent during the time the high strength waste is being processed.

Report to me the volume of high strength waste processed.

Call me if you have any questions.

cc: Pat Young - USEPA
Sheila Wiegman - ASEPA

Norman Wei said the Astro had been out of commission for several days w/a cracked engine cylinder. During that time, the cannery was still processing, thus the amount of HSW had accumulated. They had about 150,000 gals. of HSW stored in their tanks & the ASTRO's tanks were full. The boat was to make a trip out to the dump site today but there wasn't enough time for them to return & dispose of remaining waste today. If not allowed to treat HSW through ~~their~~ DAF plant today, would have to shut down operations w/in the hour. Norman felt the effluent →

limits of their NPDES permit would not be exceeded as they've been about ½ below their limits for TN + TP in the past. I talked w/ Sheila - she said was ok w/ her only if they couldn't haul the stuff out and if was one time situation. Samoa Pacific was ok - had enough storage.

I gave ok to N. Wei - asked for report of incident.

StarKist Seafood Company

An Affiliate of H.J. Heinz Company

180 East Ocean Boulevard
Long Beach, California 90802-4797
Telephone: 213-590-9900

APR 23 1993

20 April, 1993

Pat Young (E-4)
American Samoa Program Manager
US Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Pat:

Subject: **Global Positioning System for New Ocean Dumping Vessel**

I have received your letter of April 5th suggesting that we consider the use of a computer plotting system for the vessel's GPS. As I mentioned to you earlier, we are supportive of this idea to ensure an accurate plotting of the disposal paths. This was agreed to in principle with our plant management during your last visit to American Samoa.

However, with respect to your other suggestion of electronically linking the sludge pumps and disposal ports to the computer plotter, we are very concerned that such high tech setup would present a serious on-going maintenance problem for the operators. Such a system would be exposed to the harsh elements and corrosive conditions out in the open seas. Maintaining it could present a major maintenance problem for the vessel staff. This is quite different from the GPS-Plotter linkup which we feel will be workable.

We believe it would be better for us to monitor dumping operation by keeping accurate records manually instead of relying on a system that may be prone to frequent failure.

While we have no problem with using the GPS-Plotter to better define the disposal path, we respectfully request that your agency allow the operators to manually record other aspects of the dumping operation. The conditions on a sludge boat out in the open seas are not conducive to operation of high tech equipment. If there are any questions, please contact me at (310) 590-3873.

Sincerely,

Norman S. Wei
Senior Manager, Environmental Engineering

cc: Pat Cotter - EPA Region 9
M. Callaghan - StarKist Samoa
Tony Tausaga - ASEPA

Rcd 3/18/93

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company

Heinz

Box 368
Pago Pago, TuTuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

Cotter
mike

March 9, 1993

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease and total phosphorus permitted maximum concentration was exceeded during the month of January, 1993 for cooker juice and press liquor respectively.

The oil and grease concentration of the cooker juice was 23,000 mg/l. The permitted concentration is 4,830 mg/l. The total phosphorus concentration of the press liquor was 2,300 mg/l. The permitted concentration is 1,990 mg/l.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

for MAURICE W. GALLAGHAN
General Manager

/ht

cc: W. Adams
R. Higgins
R. Ward
N. Wei

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company

Heinz

P.O. Box 368
Pago Pago, TuTuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

FEB 10 1993

Copy to Pat Cotter
Mike Lee

February 8, 1993

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease and total phosphorus permitted maximum concentration was exceeded during the month of November and December, 1992 for press liquor.

The oil and grease concentration of the press liquor was 75,500 mg/l. The permitted concentration is 62,150 mg/l. The total phosphorus concentration of the press liquor was 3,100 mg/l. The permitted concentration is 1,990 mg/l.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/ht

cc: W. Adams
R. Higgins
R. Ward
N. Wei

Rcd 12/11/92
Copy to Pat Cotter
Copy to Mike
Check to Jaime

StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

8 December, 1992

The Regional Administrator
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Sir:

Subject: **Application for Ocean Dumping Permit**

Pursuant to Section 102 of the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, as amended, StarKist Samoa Inc. hereby submits its application for an ocean dumping permit:

(a) **Name and address of applicant.** StarKist Samoa Inc. P.O.Box 368, Pago Pago, American Samoa 96799.

(b) **Proposed name of transporter.** Blue North Fisheries, 1130 NW 45th, Seattle, WA 98107.

Name of Producer. StarKist Samoa, Inc.

(c) **Description of material to be dumped.** Tuna sludge from the Dissolved Air Flotation unit, cooker juice and press liquor. Extensive data on the characteristics of each waste stream are on file at US EPA Region 9 office.

(d) **Quantity of material to be dumped.** Two hundred thousand (200,000) U.S. gallons per day.

(e) **Proposed dates and times of disposal.** Material is generated whenever StarKist Samoa Inc. is in operation. Daily dumping of up to 200,000 gallons is required.

(f) **Proposed dump site.** EPA designated dump site described as a circular area with a 1.5 nautical mile radius, centered at 14° 24.00' South latitude by 170° 38.30' West longitude.

(g) **Proposed method of release.** The proposed method of release and control would be the same as those delineated in the current MPRSA Ocean Dumping Permit OD 90-01 Special.

(h) **Process or activities giving rise to the production of the material.** The material is produced during the tuna canning process in American Samoa.

(i) **Previous method of disposal.** The material has been ocean dumped at the EPA designated dump site since July 31, 1990 under StarKist Samoa Inc.'s existing MPRSA Ocean Dumping Permit OD 90-01 Special.

(j) **Need for the proposed dumping.** The need for ocean dumping in American Samoa has been demonstrated in EPA Region 9's *Final Environmental Impact Statement for the Designation of an Ocean Disposal Site off Tutuila Island, American Samoa for Fish Processing Wastes, February 24, 1989.* Without an ocean dumping permit, the canneries would not be able to operate in American Samoa and the resultant economic impact on the local economy would be severe.

(k) **Impact of ocean dumping.** The environmental impact of ocean dumping in American Samoa has been demonstrated in EPA Region 9's *Final Environmental Impact Statement for the Designation of an Ocean Disposal Site off Tutuila Island, American Samoa for Fish Processing Wastes, February 24, 1989.* Data are collected monthly at the dump site on the impact of the ocean dumping operation.

There has been no documented adverse impact of this operation since its inception with the designated site some 5.45 nautical miles from shore. Even in the pre-1988 period when the canneries were ocean dumping under the authority of an US EPA research permit at a designated site that was two nautical miles closer to shore, there were no documented evidence of sludge being washed onshore. Such conclusion was reached in US EPA's *Final Environmental Impact Statement for the Designation of an Ocean Disposal Site off Tutuila Island, American Samoa for Fish Processing Wastes, February 24, 1989 (page V-72, response to comment 10a-9).*

StarKist Samoa Inc. is proposing to contract with Blue North Fisheries to operate an ocean dumping vessel named *The Champion.* Specifications of this vessel are attached. Please note that the physical dimensions of this vessel falls within the range of vessels modelled in the computer study of March 1990.

An experienced crew will be used in American Samoa. According to Blue North Fisheries, the company has considerable experience in ocean dumping. The company owned and operated a sludge dumping vessel under contract with Kodiak Reduction Inc. from September 1989 through March 1992 in Kodiak, Alaska. The contract was completed without accidents or mishaps.

Enclosed is a check for the amount of $1,000 to cover the processing fee.

If there are any questions concerning this permit application, please contact the undersign or Norman Wei of our corporate office at (310) 590-3873.

Sincerely,

Maurice W. Callaghan
General Manager

Attachment

D:\wei\samoa\dump\apply

DIMENSIONS

Length: 165 ft.
Width: 38 ft.
Depth: 14 ft.

Built: Greenville, Mississippi
Year: 1977
Steel Hull - all welded
Completely refurbished in July 1989
Clear Deck Space:
109.5 ft by 27.25 ft.

CAPACITIES

Liquid Mud: 1160 bbls.
Dry Bulk: 3000 cu. ft.
Fuel: 50,000 gals. approx.

Water & Ballast: Approx. 100,000 gals.
Calcium Chloride Tanks: 18,791 gals.
Deck Cargo: 438 L.T.

MACHINERY

Main Engines: (2) Caterpillar D398D
1700 HP @ 1225 RPM
Completely Rebuilt July 1989

Generators: (2) 99 KW 225/450 V AC
GM 8V71

Main Gears: (2) Caterpillar 7261
3.84:1
Completely Rebuilt July 1989

Props: (2) 75" x 50" 4 blade stainless

Shaft: (2) 6.5"

Note: Keel cooled, air start

Steering: Electro-hydraulic

Fire pump: 3" 15 HP Gould

CERTIFICATION

Flag: United States of American
Gross Tonnage: 279.8
ABS - Loand Line Only

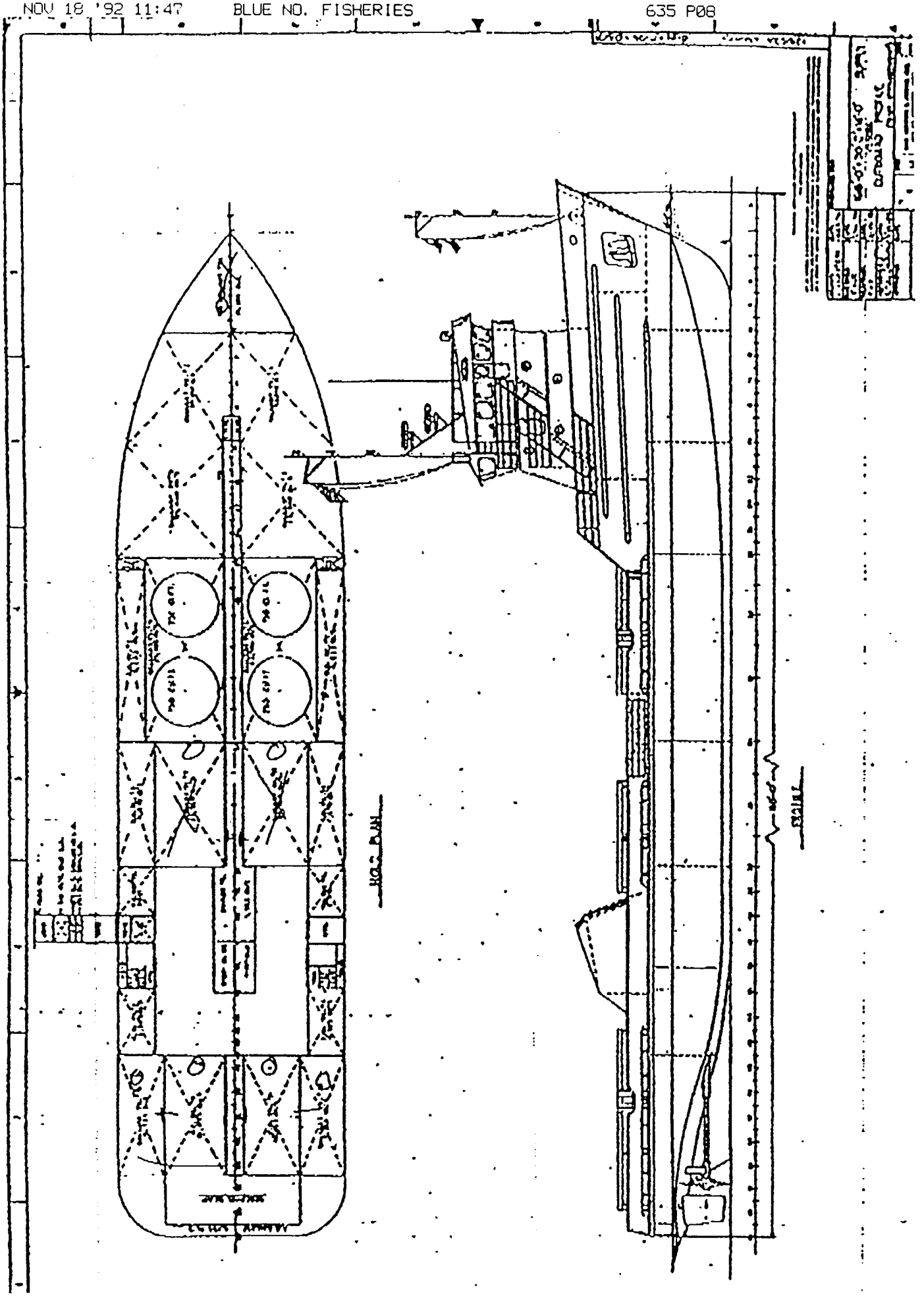
USCG - Ocean Service OSV

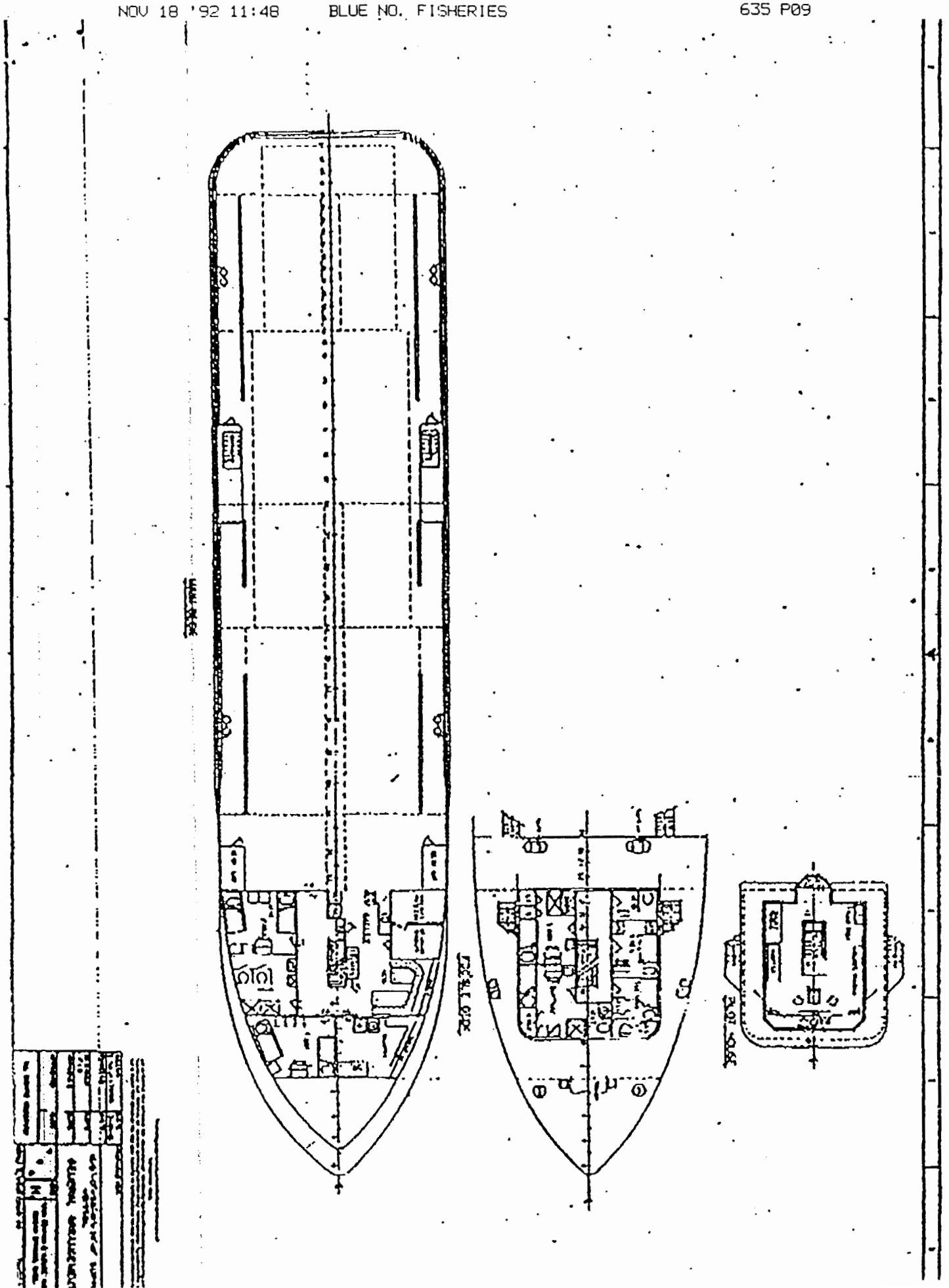
ACCOMMODATIONS

Quarters for 14 persons with captain's and engineer's staterooms.
Central air.
Fully equipped galley

ELECTRONICS

Radar, (2) VHF, SSB, Loran, Fathometer.





Star-Kist Samoa, *Inc.*

PAGO PAGO • TUTUILA ISLAND • AMERICAN SAMOA

NOT VALID AFTER 60 DAYS

AMERICAN SAMOA BRANCH
BANK OF HAWAII
PAGO PAGO, TUTUILA
AMERICAN SAMOA 96799

101-400
1214

No. 76578

12-4-92

PAY TO THE ORDER OF

Thr[illegible] and 1,000 dls 00cts

UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY, REGION 9
75 HAWTHORNE STREET
SAN FRANCISCO CA 94105-3901

GENERAL ACCOUNT

Dwayne N. [illegible]

[illegible]

⑆121404006⑆ 0034⑈003939⑈

Diane [illegible]
12/11/92

Cpy to P. Cotter
Mike

StarKist Samoa, Inc.

October 22, 1992

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease permitted maximum concentration was exceeded during the month of October, 1992 for press liquor.

The oil and grease concentration of the press liquor was 91,000 mg/l. The permitted concentration is 62,150 mg/l.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

for MAURICE W. CALLAGHAN
General Manager

/ht

cc: W. Adams
R. Higgins
R. Ward
N. Wei

StarKist Samoa, Inc.

SEP 10 1992

Mike Cotter

August 31, 1992

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease permitted maximum concentration was exceeded during the month of July, 1992 for cooker juice.

The oil and grease concentration of the cooker juice was 12,600 mg/l. The permitted concentration is 4,830 mg/l.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/ht

cc: W. Adams
R. Higgins
R. Ward
N. Wei

AUG 2 7 1992

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company

Heinz

P.O. Box 368
Pago Pago, TuTuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

Cpy to Pat Cotter Mike Lee

August 19, 1992

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of StarKist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease and total solids permitted maximum concentration was exceeded during the month of May, 1992 for press liquor.

The oil and grease concentration of the press liquor was 114,500 mg/l. The total solids concentration of the press liquor was 288,000 mg/l. The permitted concentration is 62,150 mg/l and 271,920 mg/l respectively.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/ht

cc: S. Wiegman
W. Adams
R. Higgins
R. Ward
N. Wei

6/15/92
Copy to P. Cotter
M. Lee

StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

June 10, 1992

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease permitted maximum concentration was exceeded during the month of April, 1992 for cooker and press liquor.

The oil and grease concentration of the cooker and press liquor was 9,000 mg/l and 80,400 mg/l respectively. The permitted concentration is 4,830 mg/l and 62,150 mg/l respectively.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/ht

cc: W. Adams
R. Higgins
R. Ward
N. Wei

Copy to P. Cotter
M. Lee

StarKist Samoa, Inc.

P.O. BOX 368 PAGO PAGO, AMERICAN SAMOA 96799

(684) 644-4231
FAX NO: (684) 644-2440

June 10, 1992

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Environmental Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the total phosphorus permitted maximum concentration was exceeded during the month of March, 1992 for press liquor.

The total phosphorus concentration of the press liquor was 3,620 mg/l. The permitted concentration is 1,990 mg/l.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/ht

cc: W. Adams
R. Higgins
R. Ward
N. Wei

StarKist Samoa, Inc.

APR

April 8, 1992

Norman L. Lovelace
Chief, Office of Pacific Island
and Native American Programs
United States Environmental Protection
Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Lovelace,

As required under Paragraph 15 of the Consent Agreement and final order on Consent Assessing Civil Penalty from StarKist Samoa Inc. for violation of the Marine Protection, Research and Sanctuaries Act, attached is the Certified Statement from the Captain of the M/V Astro indicating that he has received the instruction and that he understands the requirements of Special Conditions 4.3 and 4.4.

Yours truly,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

MWC:tl

cc: Regional Hearing Clerk
U. S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

cc: Christopher Sproul
Office of the Regional Counsel, RC-2-4
U. S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

cc: Pati Faiai, ASEPA
Norman Wei
William Adams

Pago Marine Inc.,
P.O. Box 4357
Pago Pago, AS 96799

Phones: (684) 633 1269
(684) 633 3576
Fax: (684) 633 0838

Tuesday April 4th 1995

The General Managers,

V.S. Ocean Packing Co. Inc.,
P.O. Box 257,
Pago Pago, AS 96799

(Attn: Mr M. Macready)

→ Star Kist Samoa Inc.,
P.O. Box 368,
Pago Pago, AS 96799

(Attn: Mr N. Callaghan)

re: Docket No MHRSA-1A-95: Consent Agreement Clause 15.

STATEMENT BY CAPTAIN N.V. ASTRO

I, Vesselli Romano, Captain M.V. Astro confirm that I have received instruction, and understand the requirements of Special Conditions 4.3 and 4.4 of the Ocean Dragnet Permits. Further, that I believe I am capable of ensuring compliance with these conditions and will, to the best of my ability, ensure that the conditions are met.

Signed

Witness

T.C. Simmons
Acting General Manager
Pago Marine Inc.

FEB 20 1992

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company

Heinz

P.O. 368
Pago Pago, TuTuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

Copy to ... Mike Lee

February 10, 1992

OPINAP (E-4)
U. S. Environmental Protection
 Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of StarKist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease and total phosphorus permitted maximum concentration was exceeded during the month of December, 1991 for cooker and press liquor.

The oil and grease concentration of the cooker juice was 13,400 mg/l. The total phosphorus concentration of the press liquor was 2,180 mg/l. The permitted concentration is 4,830 mg/l and 1,990 respectively.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/tl

cc: W. Adams
R. Higgins
R. Ward
N. Wei

U.S. Department of Transportation
United States Coast Guard

U. S. Coast Guard
Liaison Office

P. O Box 249
Pago Pago, AS 96799
(684) 633-2299

Copy to: Pat Cotter
: Chris Spurl
: Mike Lee

09 October 1991

Pago Marine Inc.
P.O. Box 4058
Pago Pago, American Samoa 96799

Mr. Harrington:

Your request to ratify Section 4.5 of the Marine Protection, Research and Sanctuaries Act Ocean Dumping Permit No. OD 90-02 Special, by the addition of a Global Positioning System on board the dumping vessel ASTRO, has been approved.

Section 4.5 states: "The permittee shall employ an on board electronic positioning system to fix the position of the disposal vessel accurately during all dumping operations. This system is subject to advance approval by EPA Region 9 and the U.S. Coast Guard Liaison Officer, Pago Pago 15 days after the effective date of the permit."

The use of a Global Positioning System in addition to radar is the most accurate and cost effective means of navigation in the dumping area. Thank you for your concern and prompt response to this matter.

W. R. Clark

W.R. CLARK
Coast Guard Liaison

Encl: (1) ERA Region IX ltr of 19 Sep 91

Copy: EPA Region IX
American Samoa EPA
CCGD14(m)
MSO Honolulu

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

September 19, 1991

VIA FAX

Doug Harrington
V/P General Manager
Pago Marine Inc.
P.O. Box 4058
Pago Pago, American Samoa 96799

Re: Approval of Provnav Global Positioning System for the MV ASTRO

Dear Mr. Harrington:

Your FAX message to Christopher Sproul of our Office of Regional Counsel requesting USEPA's approval of the Pronav Global Positioning System for the M/V ASTRO has been referred to my office for response. We understand from your FAX that this navigational system was purchased in order for the operator of the MV ASTRO to maintain accurate positioning while performing ocean disposal activities as required by the ocean disposal permits issued to Star-Kist Samoa and VCS Samoa Packing.

Patrick Cotter, USEPA's Ocean Disposal Coordinator and Pat Young, American Samoa Program Manager, had a telephone conversation today with Russ Julien, shop manager of your company, to get an understanding of the accuracy of the system and how often a fix can be obtained with this system. Mr. Julien indicated that he had already used the system on test runs on his own boat and said one could get a fix every second and that the instrument was accurate within 100 feet. Based on this information, we find that this navigational system is adequate for positioning purposes during disposal operations under the permits. It is our understanding from Mr. Julien that the system is presently being tested and installed on the ASTRO, and that the U.S. Coast Guard Liaison Officer is being kept apprised of the situation. Since the Coast Guard has the navigational expertise, we condition our approval of the Pronav Global Positioning System for the ASTRO upon a finding by the U.S. Coast Guard that the system is adequate, has been properly installed and is properly functioning.

ENCLOSURE( )

Should you have any questions please contact Pat Young, American Samoa Program Manager at (415) 744-1591 or Patrick Cotter at (415) 744-1163.

Sincerely,

James B. Brun

for Norman L. Lovelace
Chief, Office of Pacific Island and
Native American Programs

cc: Sheila Wiegman, ASEPA
Lt. Randy Clark, CGLO ✓

bc: Patrick Cotter, W-7-1
Chris Sproul, ORC

PAGO MARINE INC.
POST OFFICE BOX 4058
PAGO PAGO AMERICAN SAMOA
96799
PHONES (684) 633 1069/633 5576
FAX (684) 633 5898

TIME 0920 | FAX MESSAGE | DATE SEPTEMBER 20 1991

TO: U.S.E.P.A REGION IX

REFERENCE: M/V ASTRO

FROM DOUG HARRINGTON

ATTENTION: CHRISTOPHER A. SPROUL

DEAR MR. SPROUL.
AS WAS MENTIONED IN AN EARLIER PHONE CONVERSATION WITH YOU, PAGO MARINE INC. HAVE PROCURED A PRONAV GLOBAL POSITIONING SYSTEM FOR THE M/V ASTRO.
REF: MPRSA PERMITS NOS. 90-01 AND 90-02.
THIS HAS BEEN PURCHACED IN ORDER FOR THE ASTRO TO MAINTAIN THE MOST ACCURATE POSITIONING AVAILABLE WHILE PERFORMING ITS OCEAN DUMPING OF CANNERY WASTE.
WE, PAGO MARINE INC. SEEK YOUR E.P.A. APPROVAL OF THIS INSTRUMENT FOR THE PURPOSE STATED ABOVE, PRIOR TO INSTALLATION, AND IMPLEMENTATION ABOARD THE VESSEL ASTRO.
IT WOULD BE APPREICATED IF YOU COULD ANSWER THIS REQUEST BY FAX IN ORDER FOR US TO EXPIDITE ITS USAGE.

THE FINANCE INFORMATION WHICH YOU HAVE REQUESTED IS BEING COMPILED AT PRESENT BY OUR ACCOUNTS AND SHOULD BE FAXED TO YOU WITHIN THE NEXT DAY OR TWO.
BEST REGARDS,

Doug Harrington

DOUG HARRINGTON
V/P GENERAL MANAGER
PAGO MARINE INC.

(((((

GULF COAST MARINE ELECTRONICS CORP.
4243 N. West Shore Blvd. • Tampa, Florida 33614
Telephone (813) 877-3084 • Telex 529816
FAX (813) 875-4514

INVOICE NO. 1 0000010

PAGE

SOLD TO PAGO MARINE, INC.
POST OFFICE BOX 4058
PAGO PAGO AMERICAN SAMOA

96799

SHIP TO: PAGO MARINE, INC.
POST OFFICE BOX 4058
PAGO PAGO AMERICAN SAMOA

96799

DATE	SALESPERSON	ORDER NUMBER	CUSTOMER NO.	SHIP VIA - DATE	TERMS	REFERENCE NO.
08/23/91	001	684-633-1069	PAGO	EXPRESS MAIL 08/27/91	WIRE TRANSF	

QTY ORDERED	QTY SHIPPED	QTY B/O	ITEM NUMBER	DESCRIPTION	UNIT	UNIT PRICE	AMOUNT
1	1	0	GPS-100	PRONAV 250 WAYPOINT GPS	EA	1740.000	1740.00
		S/N	: 91133011				
1	1	0	1011	MARINE/R.V.REMOTE ANTENNA	EA	275.000	275.00
				DELIVERY & FREIGHT			50.00

NON-TAXABLE	TAXABLE	SALES TAX	FREIGHT	MISCELLANEOUS	TOTAL AMOUNT
2015.00	.00	.00	50.00	.00	2065.00

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

16 SEP 1991 Cpy to Pat Cotter
Mike

AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799

In reply refer to:

OFFICE OF THE GOVERNOR
ENVIRONMENTAL PROTECTION AGENCY
Serial: 393

September 10, 199

Pat Young
American Samoa Project Officer
Office of Pacific Island & Native
American Programs
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Dear Pat:

At a recent meeting with cannery officials the following questions and requests were voiced which require your assistance.

1. The boat operator requests guidance on the dumping pattern and procedure to be used on calm days when no surface or subsurface current is apparent.

2. Please provide us with a copy of the document, "Evaluation of Survey Positing Methods for Nearshore Marine and Estuarine Waters, U.S. EPA, Office of Marine and Estuarine Protection, Washington, D.C., 1987 EPA 430/9-86-003.

3. • The U.S. Coast Guard Liaison Officer to American Samoa requests clarification on the necessity for prenotification, Condition 6.1 of the Ocean Dumping Permits. The permittees state this condition was deleted in a letter from U.S. EPA. Could this be verified?

I appreciate your assistance in these matters. Please contact me with any questions.

Sincerely,

Sheila Wiegman
Environmental Coordinator
American Samoa Environmental
Protection Agency

cc: Lt. Randy Clark, CGLO
Env. Coordinator, ASEPA
Enforcement Branch, ASEPA
Lt. Lua Moliga, Marine Patrol, DPS

16 SEP 1991 Copy to Pat Cotter
Mike

AMERICAN SAMOA GOVERNMENT
PAGO PAGO, AMERICAN SAMOA 96799

In reply refer to:

OFFICE OF THE GOVERNOR
ENVIRONMENTAL PROTECTION AGENCY
Serial: 393

September 10, 199

Pat Young
American Samoa Project Officer
Office of Pacific Island & Native
American Programs
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Dear Pat:

At a recent meeting with cannery officials the following questions and requests were voiced which require your assistance.

1. The boat operator requests guidance on the dumping pattern and procedure to be used on calm days when no surface or subsurface current is apparent.

2. Please provide us with a copy of the document, "Evaluation of Survey Positing Methods for Nearshore Marine and Estuarine Waters, U.S. EPA, Office of Marine and Estuarine Protection, Washington, D.C., 1987 EPA 430/9-86-003.

3. • The U.S. Coast Guard Liaison Officer to American Samoa requests clarification on the necessity for prenotification, Condition 6.1 of the Ocean Dumping Permits. The permittees state this condition was deleted in a letter from U.S. EPA. Could this be verified?

I appreciate your assistance in these matters. Please contact me with any questions.

Sincerely,

Sheila Wiegman
Environmental Coordinator
American Samoa Environmental
Protection Agency

cc: Lt. Randy Clark, CGLO
Env. Coordinator, ASEPA
Enforcement Branch, ASEPA
Lt. Lua Moliga, Marine Patrol, DPS

StarKist Samoa, Inc.

An Affiliate of StarKist Seafood Company

Heinz

P.O. Box 368
Pago, TuTuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

Pat Cotter
Mike

July 8, 1991

OPINAP
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease permitted maximum concentration was exceeded during the month of May in the press liquor.

The oil and grease concentration of the press liquor was 63,000 mg/l. The permitted concentration is 62,150 mg/l.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

/ht

cc: W. Adams
R. Higgins
K. Miller
R. Ward
N. Wei

Star-Kist Samoa, Inc.

An Affiliate of StarKist Seafood Company

Heinz

P.O. Box 368
Pago Pago, TuTuila Islands
American Samoa 96799
Telephone: 684-644-4231
Facsimile: 684-644-2440

8 JUL 1991

June 25, 1991

OPINAP (E-4)
U.S. Environmental Protection
Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Director
American Samoa Quality Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

This is to advise you that pursuant to Condition 3.3.4 of Starkist Samoa's Ocean Dumping Permit OD-90-01 Special, the oil and grease permitted maximum concentration was exceeded during the month of April in the press liquor.

The oil and grease concentration of the press liquor was 72,000 mg/l. The permitted concentration is 62,150 mg/l.

All other permitted concentrations were met.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
(for) General Manager

/ht

cc: W. Adams
R. Higgins
K. Miller
R. Ward
N. Wei

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

19 MAY 1992

D. H. Silk
President
Pago Marine, Inc.
P.O. Box 4058
Pago Pago, American Samoa 96799

Dear Mr. Silk:

Enclosed please find a copy of the fully executed consent agreement and final order on consent assessing civil penalty from Pago Marine, Inc. for violation of the Marine Protection, Research and Sanctuaries Act. This copy is for your files. We have received the penalty payment of $500 from your company as ordered by this agreement.

Should you have any questions regarding this matter, please contact Pat Young, American Samoa Program Manager at (415) 744-1591, or you may call Christopher Sproul, Assistant Regional Counsel, at (415) 744-1394.

Sincerely,

Norman L. Lovelace
Chief, Office of Pacific Island
and Native American Programs

Enclosure

cc: Pati Faiai, ASEPA
Sheila Wiegman, ASEPA
Jim Cox, Van Camp Seafood Company, Inc. (w/o enclosure)
Christopher Sproul, EPA ORC
Patrick Cotter, W-7-1

Christopher A. Sproul
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105
(415) 744-1322

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

In the Matter of	Docket No. MPRSA-IX-91-01
STARKIST SAMOA, INC., VCS SAMOA PACKING COMPANY, AND PAGO MARINE, INC.	COMPLAINT FOR THE ASSESSMENT OF CIVIL PENALTIES

STATUTORY AUTHORITY

1. Section 105(a) of the Marine Protection, Research and Sanctuaries Act ("MPRSA"), 33 U.S.C. § 1415(a), authorizes the Administrator of the Environmental Protection Agency ("EPA") to assess civil administrative penalties against any person who violates the Act, regulations promulgated thereunder, or permits issued pursuant to the Act. The Administrator has delegated this authority to EPA Regional Administrators. 40 C.F.R. § 220.4(b). The Regional Administrator, Region 9 has redelegated this authority to the Director of the Water Management Division, Region 9.

2. Proceedings to assess penalties for violations of the MPRSA are governed by the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, 40 C.F.R. part 22.

3. Proceedings to assess penalties in the present case are proper in that respondents have violated MPRSA section 101(a)(1), 33 U.S.C. § 1411(a)(1), and MPRSA Permit No. OD 90-01 Special and/or MPRSA Permit No. OD 90-02 Special, which were duly issued pursuant to MPRSA section 102, 33 U.S.C. § 1412.

PARTIES

4. Complainant is the United States Environmental Protection Agency, Region IX ("EPA").

5. Respondent StarKist Samoa, Inc. ("StarKist") is a California corporation with its principal place of business located in Pago Pago, American Samoa and as such is a person within the meaning of the MPRSA. 33 U.S.C. §§ 1402(e), 1411(a)(1).

6. Respondent VCS Samoa Packing Company ("VCS") is a corporation with its principal place of business located in Pago Pago, American Samoa and as such is a person within the meaning of the MPRSA. 33 U.S.C. §§ 1402(e), 1411(a)(1).

7. Respondent Pago Marine, Inc. ("Pago Marine") is a corporation with its principal place of business located in Pago Pago, American Samoa and as such is a person within the meaning of the MPRSA. 33 U.S.C. §§ 1402(e), 1411(a)(1).

VIOLATIONS OF THE MPRSA

8. StarKist is authorized by MPRSA Permit No. 90-01 Special

to dispose fish processing wastes generated at its cannery located in Pago Pago, American Samoa into the Pacific Ocean near American Samoa. Except as otherwise authorized by this Permit, it is unlawful under MPRSA section 101(a), 33 U.S.C. § 1411(a), for StarKist to transport any materials from its cannery for the purpose of disposing these materials into ocean waters.

9. VCS is authorized by MPRSA Permit No. 90-02 Special to dispose fish processing wastes generated at its cannery located in Pago Pago, American Samoa into the Pacific Ocean near American Samoa. Except as otherwise authorized by this Permit, it is unlawful under MPRSA section 101(a), 33 U.S.C. § 1411(a), for VCS to transport any materials from its cannery for the purpose of disposing these materials into ocean waters.

10. Pago Marine is authorized by MPRSA Permits Nos. 90-01 Special and 90-02 Special to transport and dispose of fish processing wastes generated at StarKist's and VCS's canneries located in Pago Pago, American Samoa into the Pacific Ocean near American Samoa. Except as otherwise authorized by this Permit, it is unlawful under MPRSA section 101(a), 33 U.S.C. § 1411(a), for Pago Marine to transport any materials from these canneries for the purpose of disposing these materials into ocean waters.

11. Special Conditions 4.3 and 4.4 of MPRSA Permits Nos. 90-01 and 90-02 require StarKist, VCS and Pago Marine to perform all disposal of fish processing wastes in a prescribed manner. Specifically, on each disposal trip, the disposal vessel used for dumping must proceed to the center of the ocean disposal site specified in Special Condition 2.2 and determine the prevailing

ocean current. The master of the vessel must then proceed 1.1 nautical miles up current from the center of the disposal site before commencing disposal. This point is defined by Special Condition 4.3 as the "starting point" for disposal operations. While disposing material, the disposal vessel must follow a track defined as a line extending 1.0 nautical miles to either side of the "starting point" and aligned perpendicular to the prevailing current.

12. On 145 separate disposal vessel trips between August 7, 1990 and January 31, 1991, Pago Marine, on behalf of and with authority from StarKist and VCS, transported and disposed of commingled fish processing wastes from StarKist's and VCS's canneries into ocean waters without adhering to Special Conditions 4.3 and 4.4 of MPRSA Permits Nos. 90-01 Special and 90-02 Special. By so transporting and disposing of fish processing wastes in a manner other than as authorized under these MPRSA permits, StarKist, VCS and Pago Marine each committed 145 separate violations of MPRSA section 101(a), 33 U.S.C. § 1411(a) and a duly issued MPRSA permit.

PROPOSED CIVIL PENALTY

13. Section 105(a) of the MPRSA authorizes EPA to assess administratively a civil penalty against any person who violates the Act or a permit issued pursuant to the Act. 33 U.S.C. § 1415(c). A penalty of not more than $50,000 may be assessed for each violation. Id. In assessing a penalty, each day of a continuing violation, and dumping from each vessel, constitutes a separate offense. MPRSA section 105(c); 33 U.S.C. § 1415(c).

14. Taking into account the respondents' violations of the MPRSA set forth above and the gravity of the violations, prior violations (if any), and good faith efforts to achieve compliance after notification of the violation, EPA proposes to assess StarKist a penalty of $10,000, VCS a penalty of $10,000, and Pago Marine a penalty of $5,000.

15. Within thirty (30) days of a final Order Assessing Administrative Penalties, StarKist, VCS, and Pago Marine shall each tender money orders or certified checks via certified mail in the amounts specified above made payable to the Treasurer, United States of America to:

U.S. Environmental Protection Agency
Region IX
Regional Hearing Clerk
P.O. Box 360863M
Pittsburgh, PA 15251

and mail photocopies via certified mail of the money orders or checks to:

U.S. Environmental Protection Agency
Region IX
Regional Hearing Clerk
75 Hawthorne Street
San Francisco, CA 94105

NOTICE OF OPPORTUNITY FOR HEARING

16. In accordance with MPRSA section 105(a), 33 U.S.C. § 1415(a), the EPA hereby gives notice to the StarKist, VCS, and Pago Marine that they may request a hearing on this matter by filing an Answer to this Complaint with the Regional Hearing Clerk, U.S. Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105 via certified or first class mail within twenty (20) days of receiving service of this Complaint. 40

C.F.R. § 22.15(a) and (c).

July 17, 1991
DATE

HARRY SERAYDARIAN
Director, Water Management Division
U.S. Environmental Protection Agency,
Region IX
75 Hawthorne Street
San Francisco, California 94105

Christopher A. Sproul
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105
(415) 744-1394

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

In the matter of	Docket No. MPRSA-IX-91-01
STARKIST SAMOA, INC., VCS SAMOA PACKING COMPANY, and PAGO MARINE, INC.	CONSENT AGREEMENT AND FINAL ORDER ON CONSENT ASSESSING ADMINISTRATIVE CIVIL PENALTY
Respondents.	

CONSENT AGREEMENT

The UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION IX ("EPA Region IX" or "EPA") has issued an Administrative Complaint for the Assessment of Civil Penalty In the Matter of Starkist Samoa, Inc., VCS Samoa Packing Company, and Pago Marine, Inc., Docket No. MPRSA-IX-91-01, pursuant to section 105(a) of

the Marine Protection, Research and Sanctuaries Act ("MPRSA") alleging that the RESPONDENTS STARKIST SAMOA, INC. ("StarKist"), VCS SAMOA PACKING COMPANY ("VCS"), and PAGO MARINE, INC. ("Pago Marine") have violated the MPRSA. The EPA, StarKist, VCS and Pago Marine having entered into this Consent Agreement,

NOW, THEREFORE, EPA, StarKist, VCS, and Pago Marine HEREBY STIPULATE AS FOLLOWS:

1. Section 105(a) of the MPRSA authorizes EPA to assess administratively a civil penalty against any person who violates the Act or a permit issued pursuant to the Act of not more than $50,000 per violation. 33 U.S.C. § 1415(a). The Administrator has delegated this authority to EPA Regional Administrators. 40 C.F.R. § 220.4(b). The Regional Administrator, Region IX has redelegated this authority to the Director of the Water Management Division, Region IX.

2. Each day of a continuing violation, as well as the unauthorized dumping from each vessel, constitutes a separate MPRSA offense that may be subject to assessment of a penalty of up to $50,000. MPRSA § 105(c); 33 U.S.C. § 1415(c). In assessing a penalty for any violations, EPA must take into account the gravity of the violations, any prior violations, and any good faith efforts to comply with the MPRSA after being notified of violations. MPRSA § 105(a), 33 U.S.C. § 1415(a).

3. StarKist is a California corporation with its principal place of business located in Pago Pago, American Samoa and as such is a person within the meaning of the MPRSA. 33 U.S.C. §§ 1402(e) and 1411(a). StarKist is authorized to dispose

fish processing wastes into the Pacific Ocean near American Samoa at a designated dump site by MPRSA Permit No. OD 90-01 Special.

4. VCS is a corporation with its principal place of business located in Pago Pago, American Samoa and as such is a person within the meaning of the MPRSA. 33 U.S.C. §§ 1402(e) and 1411(a). VCS is authorized to dispose fish processing wastes into the Pacific Ocean near American Samoa at a designated dump site by MPRSA Permit No. OD 90-02 Special.

5. Pago Marine is an American Samoa corporation with its principal place of business located in Pago Pago, American Samoa and as such is a person within the meaning of the MPRSA. 33 U.S.C. §§ 1402(e) and 1411(a). MPRSA Permits Nos. OD 90-01 and 90-02 Special ("the Permits") name Pago Marine as the waste transporter of the fish processing wastes that StarKist and VCS dump into the Pacific Ocean pursuant to the Permits. On all disposal trips, Pago Marine disposes of commingled fish processing wastes from StarKist and VCS.

6. EPA Region IX brought this action to assess civil penalties for alleged violations committed by StarKist, VCS, and Pago Marine of MPRSA section 101(a), 33 U.S.C. § 1411(a), and the Permits issued pursuant to MPRSA section 102, 33 U.S.C. § 1412. EPA alleged that StarKist, VCS, and Pago Marine violated the MPRSA and the Permits by failing to adhere to Special Conditions 4.3 and 4.4 of the Permits.

7. Special Conditions 4.3 and 4.4 of the Permits require that on all ocean dumping operations authorized under the Permits, the disposal vessel must proceed to the center of the

designated ocean dump site, determine the prevailing current, and then proceed 1.1 nautical miles up current from the center of the disposal site before commencing dumping. The intent of this requirement is to maximize the dispersion of wastes within the designated dump site and to ensure that currents do not carry the wastes beyond the authorized dump site boundaries. EPA has alleged that the respondents failed to conduct dumping operations as required by Special Conditions 4.3 and 4.4 of the Permits on each of 145 separate disposal vessel trips between August 7, 1990 and January 31, 1991.

8. For their violations alleged in the Complaint, StarKist and VCS shall each pay to the United States a civil penalty of $2,000. In addition, StarKist and VCS shall each contribute $6,000 to the Supplemental Environmental Project described in paragraph 10.

9. For its violations alleged in the Complaint, Pago Marine shall pay to the United States a civil penalty of $500 and contribute $1,000 to the Supplemental Environmental Project described in paragraph 10.

10. The Supplemental Environmental Project referred to in paragraphs 8 and 9 shall be the Enhanced Marine Pollution Surveillance Project described in the attached Memorandum of Understanding between EPA and the American Samoa Environmental Quality Commission (Exhibit 1).

11. To satisfy their civil penalty liability under this Consent Agreement, StarKist and VCS shall tender money orders or certified checks in the amount of $2,000, and Pago

Marine shall tender a money order or certified check in the amount of $500, made payable to the Treasurer, United States of America. StarKist, VCS and Pago Marine shall tender these money orders or checks via certified mail within thirty (30) days of receiving service of this Consent Agreement and Final Order on Consent to:

U.S. Environmental Protection Agency
Region IX
Regional Hearing Clerk
P.O. Box 360863M
Pittsburgh, PA 15251

and mail photocopies via certified mail of the money orders or checks to:

Regional Hearing Clerk
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

Christopher A. Sproul
Office of Regional Counsel, RC-2-4
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

In accordance with the Debt Collection Act of 1982, interest shall accrue on any unpaid penalties that are due and payable under this paragraph at the interest rate published by the U.S. Treasury. Such interest shall be tendered along with any late penalty payments in the same manner as specified above.

12. To satisfy their obligation to contribute to the Supplemental Environmental Project described in paragraph 10, StarKist and VCS shall tender money orders or certified checks in the amount of $6,000, and Pago Marine shall tender a money order

or certified check in the amount of $1,000, made payable to Department of Treasury, American Samoa Government (Oil Spill Trust Fund, Account No. 180). StarKist, VCS and Pago Marine shall tender these money orders or checks along with a cover letter modeled after the attached sample letter (Exhibit 2) via certified mail within thirty (30) days of receiving service of this Consent Agreement and Final Order on Consent to:

Ace Tago
Director
Department of Treasury
American Samoa Government
Pago Pago, American Samoa 96799

and mail photocopies via certified mail of these money orders or checks to:

Regional Hearing Clerk
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

Christopher A. Sproul
Office of Regional Counsel, RC-2-4
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

13. StarKist, VCS and Pago Marine shall each pay to the United States, upon written demand of EPA, a stipulated penalty of $150 for any violations of Special Conditions 4.3 and 4.4 of the Permits that occur after the execution of this Consent Agreement until the expiration date of the Permits, July 30, 1993.

14. Notwithstanding the payment of any stipulated penalty pursuant to the preceding paragraph, EPA shall retain any

and all enforcement authority, including the right to seek civil and/or criminal penalties or fines and civil injunctive relief, that it would otherwise have against StarKist, VCS, or Pago Marine for violations of the MPRSA occurring subsequent to the execution of this Consent Agreement.

15. Within thirty (30) days of receiving service of this Consent Agreement and Final Order on Consent, StarKist and VCS shall ensure that the Captain(s) of the disposal vessel(s) used on any and all ocean dumping operations authorized by the Permits has received all instruction necessary for navigating the disposal vessel(s) in the manner required by Special Conditions 4.3 and 4.4. StarKist and VCS shall submit to EPA a certified statement or statements from the Captain(s) indicating that the Captain(s) have received this instruction and that the Captain(s) understand the requirements of Special Conditions 4.3 and 4.4, are capable of ensuring compliance with these conditions, and will, to the best of their ability, ensure that the conditions are met.

16. If new Captain(s) are hired to pilot disposal vessel(s) while the Permits are in effect, StarKist and VCS shall, before these Captain(s) are allowed to pilot disposal vessel(s), provide instruction to these new Captain(s) and secure certified statement(s) from them in the same manner as required in the preceding paragraph for the current Captain(s).

17. The responsibility to meet the requirements of paragraphs 15 and 16 shall be the joint obligation of StarKist and VCS. If StarKist and VCS fail to complete the requirements

of paragraphs 15 and 16 by the deadlines established by those paragraphs, then StarKist and VCS shall each pay to the United States, upon written demand from EPA, a stipulated penalty of $100 per day until the requirements of paragraphs 15 and 16 are met.

18. StarKist, VCS, and Pago Marine shall not deduct the civil penalties or Supplemental Environmental Project contributions provided for in paragraphs 8, 9, 11-13 and 17 from their income for purposes of federal, state or local income tax.

19. Payment of the civil penalties and contributions to the Supplemental Environmental Project referred to in paragraphs 8, 9, and 11-12, together with adherence to all additional requirements of this Consent Agreement and accompanying Final Order on Consent, shall constitute full satisfaction of any and all MPRSA civil penalty liability for StarKist, VCS, and Pago Marine for the MPRSA violations alleged in the Complaint.

20. Nothing in this Consent Agreement shall in any way limit any right that EPA might otherwise have to seek injunctive relief against StarKist, VCS and Pago Marine for violations of any provision of federal law. Except as otherwise provided in paragraph 19 of this Consent Agreement, EPA retains all legal rights and remedies it would otherwise have against StarKist, VCS and Pago Marine for violations of any provision of federal law.

21. StarKist, VCS, and Pago Marine neither admit nor deny liability for any of the violations alleged by EPA in the Complaint in this Matter.

22. In entering this Consent Agreement, EPA, StarKist, VCS, and Pago Marine hereby waive any and all rights to an appeal of the Order on Consent to be entered in this Matter.

23. If StarKist, VCS, or Pago Marine disputes any claim made by EPA for stipulated penalties pursuant to this Consent Agreement, StarKist, VCS or Pago Marine shall state this in writing to EPA and request a hearing before EPA Region IX's Regional Judicial Officer within thirty (30) days of receiving EPA's demand for stipulated penalties. Failure to adhere to this requirement shall constitute waiver of any right to contest or appeal stipulated penalty liability. The decision made by the Regional Judicial Officer following a hearing on any stipulated penalties dispute shall be binding and shall not be appealed by EPA, StarKist, VCS or Pago Marine to any administrative or judicial authority.

FOR THE CONSENTING PARTIES:

5/14/92
Date

Harry Seraydarian
Director, Water Management Division
U.S. Environmental Protection Agency,
Region IX

4.8.92
Date

Maurice W. Callaghan
President and General Manager
StarKist Samoa, Inc.

Date

~~Michael P. MacReady~~
~~General Manager~~
~~VCS Samoa Packing Company~~

22. In entering this Consent Agreement, EPA, StarKist, VCS, and Pago Marine hereby waive any and all rights to an appeal of the Order on Consent to be entered in this Matter.

23. If StarKist, VCS, or Pago Marine disputes any claim made by EPA for stipulated penalties pursuant to this Consent Agreement, StarKist, VCS or Pago Marine shall state this in writing to EPA and request a hearing before EPA Region IX's Regional Judicial Officer within thirty (30) days of receiving EPA's demand for stipulated penalties. Failure to adhere to this requirement shall constitute waiver of any right to contest or appeal stipulated penalty liability. The decision made by the Regional Judicial Officer following a hearing on any stipulated penalties dispute shall be binding and shall not be appealed by EPA, StarKist, VCS or Pago Marine to any administrative or judicial authority.

FOR THE CONSENTING PARTIES:

_____
Date

~~Harry Seraydarian~~
~~Director, Water Management Division~~
~~U.S. Environmental Protection Agency,~~
~~Region IX.~~

_____
Date

~~Maurice W. Callaghan~~
~~President and General Manager~~
~~StarKist Samoa, Inc.~~

4-1-92
Date

M.P.
Michael P. MacReady
General Manager
VCS Samoa Packing Company

3-20-92
Date

With Power of attorney for:
D.H. Silk
President
Pago Marine, Inc.

FINAL ORDER ON CONSENT

EPA Region IX, StarKist, VCS, and Pago Marine having entered into the foregoing Consent Agreement,

IT IS HEREBY ORDERED THAT:

1. StarKist and VCS shall each pay a civil penalty of $2,000 and Pago Marine shall pay a civil penalty of $500 to the Treasurer of the United States of America as specified in the Consent Agreement.

2. StarKist, VCS and Pago Marine shall adhere to all further requirements of the Consent Agreement, including the requirements to contribute to a Supplemental Environmental Project, instruct disposal vessel Captain(s) on proper disposal requirements and submit the required certified statements from disposal vessel Captain(s), pay stipulated penalties for permit and/or Consent Agreement violations upon written demand from EPA unless successfully contested as provided for in the Consent Agreement, and refrain from claiming the penalties or contributions required under the Consent Agreement as deductions from income for federal, state, or local income tax purposes.

3. This order constitutes full adjudication of the Complaint against StarKist, VCS, and Pago Marine issued by EPA in this Matter. This order shall remain in effect until MPRSA Permits Nos. OD 90-01 and OD 90-02 Special expire on July 30, 1993.

5-18-92
Date

Steven W. Anderson
Regional Judicial Officer
U.S. Environmental Protection Agency, Region IX

MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. ENVIRONMENTAL PROTECTION AGENCY AND THE ENVIRONMENTAL QUALITY COMMISSION CONCERNING THE SAMOA PACKING CO. AND STAR KIST SAMOA INC. SUPPLEMENTAL ENVIRONMENTAL PROJECT

I. OBJECTIVE

The U.S. Environmental Protection Agency (USEPA) and Environmental Quality Commission (EQC) seek to implement a Supplemental Environmental Project in lieu of civil fines collected from VCS Samoa Packing Co. and Star Kist Samoa Inc. for violations of Special Ocean Dumping Permits OD 09-01 and OD 90-02 respectively, dated July 31, 1990. The purpose of this Memorandum of Understanding (MOU) is to clarify the roles and responsibilities regarding the Supplemental Environmental Project, Enhanced Marine Pollution Surveillance.

II. USEPA ROLE AND RESPONSIBILITIES

A. Funding in the amount of $13,000 will be collected by USEPA for implementation of this project from Pago Marine, Inc., Samoa Packing Co., and Star Kist Samoa, Inc. in lieu of civil fines. This will be deposited in the Oil Spill Trust Fund, American Samoa Government Account No. 180, which is administered by the Executive Secretary, EQC.

B. USEPA, Region 9, Office of Pacific Island and Native American Programs, will provide guidance and oversight as necessary to EQC for implementation of the Supplemental Environmental Project.

C. Approval in writing from Norman L. Lovelace, Chief, Office of Pacific Island and Native American Programs, USEPA Region 9, will be obtained for all expenditures.

III. EQC ROLE AND RESPONSIBILITIES

A. EQC will be responsible for planning, implementation, and follow up of the Enhanced Marine Pollution Surveillance Project.

B. EQC will be responsible through the Marine Enforcement Unit and EQC staff for meeting the following functions of the project.

1. Complete an increased number of routine and unplanned vessel, cannery facility, and wharf inspections for pollution violations.

2. Monitor on a more frequent basis vessels, facilities, and the wharf by boat spontaneously on a 24-hour basis for pollution violations.

3. Routinely and spontaneously monitor the ocean dumping of cannery sludge for compliance with Special Ocean Dumping Permits No. OD 90-01 and OD 90-02.

4. Provide staff support, equipment and training to effectively carry out the above increased functions.

5. Complete a pamphlet for all vessels in English, Chinese, Korean, and Samoan outlining pollution and marine laws.

C. EQC will determine the frequency and schedule necessary to effectively prevent pollution violations. A plan (see Attachment A) to carry out the functions listed in B. above will be submitted to USEPA for approval within 30 days of the effective date of the settlement agreement.

D. The EQC will provide a report with recommendations to the canneries, its waste transporter, and the USEPA outlining corrections or improvements on the waste disposal operation six months after initiation of the project.

E. The MEU shall continue its increased inspection and monitoring activities to insure implementation of its recommendations by the canneries and associated vessels. The EQC will document the effectiveness of the project in a report submitted 12 months after initiation of the project detailing the success of the project through frequency of inspections, the number and type of violations cited, the number and type of pollution events, the amount of fines collected, and reports on cannery ocean dumping.

IV. ACCOUNTING PROCEDURES

A. Funds for this project will be deposited in the Oil Spill Trust Fund Account, American Samoa Government Treasury Department Account No. 180 to be administered by the Executive Secretary, EQC. A separate accounting of the total amount of this project, $13,000, will be maintained by the EQC Executive Secretary. Disbursements will be made from this fund only for expenses related to this project upon authorization by the EQC Executive Secretary. Expenditures shall be made only with prior approval of Norman L. Lovelace, Chief, Office of Pacific Island and Native American Programs, EPA Region 9.

B. The funds deposited in this account shall be utilized only for this project. A quarterly accounting of the funds will be provided to USEPA, Samoa Packing, Inc., Star Kist Samoa, and Pago Marine, Inc. within 30 days after the close of the quarter.

C. The Executive Secretary of the EQC shall be responsible for providing reports on the fund disbursement and followup.

V. GENERAL PROVISIONS

A. This MOU does not supplement or replace other understandings or arrangements between USEPA and EQC, or other responsibilities and duties of USEPA or EQC.

b. This MOU may be modified from time to time by mutual consent and officially endorsed by the Director, Water Management Division of USEPA, Region 9 and Chairman of EQC.

c. This MOU shall be effective upon signature by the Director, Water Management Division, USEPA, Region 9, and Chairman of EQC and shall remain in effect until terminated.

IN WITNESS WHEREOF, each of the parties hereto has executed this MOU as of the day and year first written below:

WITNESS:

BY: _____
HARRY SERAYDARIAN, DIRECTOR
WATER MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 9

DATE: 5/14/92

BY: _____
WILLIAM P. COLEMAN, CHAIRMAN
ENVIRONMENTAL QUALITY COMMISSION

DATE: 11-29-91

ENHANCED MARINE POLLUTION SURVEILLANCE PROJECT PLAN

Introduction

The U.S. Environmental Protection Agency (ASEPA) has collected $13,000 in fines from Star Kist Samoa, Samoa Packing Co., and Pago Marine for violations of Ocean Dumping Permit conditions. These funds will be utilized to conduct the Enhanced Marine Pollution Surveillance Project (EMPSP). The roles and responsibilities of the USEPA, the Environmental Quality Commission (EQC), and accounting procedures are contained in a Memorandum of Understanding between these agencies. This project will be completed by the Marine Enforcement Division (MED) and the EQC. The following plan outlines the objectives of this project and how they will be met.

Objectives and Activities

1. Complete an increased number of routine and unplanned vessel, cannery facility, and wharf inspections for pollution violations.

   Presently, the MED patrols the areas within Pago Pago Harbor most vulnerable for pollution incidents by vehicle and foot three times daily. This will be increased to twice per shift for a 3 month period depending upon weather and staffing. Search and rescue and emergency response may take priority. Records of observations from inspections and the number of tickets issued will be reviewed after the three month period to determine the effect of increased patrols on compliance. In addition, patrols will be completed at staggered times to prevent anticipation by potential violators.

2. Monitor on a more frequent basis vessels, facilities, and the wharf by boat spontaneously on a 24-hour basis for pollution violations.

   Patrols via inflatable or a Boston Whaler are made once per day depending upon the staffing. These patrols will be increased to twice per day and at varied times depending upon weather and staffing. Search and rescue and emergency response may take priority. Surveillance after dark will be made a priority. This will continue for a 3 month period after which a review of records will be completed to determine the effectiveness of the surveillance.

3. Routinely and spontaneously monitor the ocean dumping of cannery sludge for compliance with Special Ocean Dumping Permit Nos. OD 90-01 and OD 90-02.

   Presently the MED monitors ocean dumping of sludge on at least a weekly basis. This will be increased to two to three times weekly or a six month period. Monitoring will include: 1) checking on the correct dump site via land bearings; 2) determining whether the correct dumping pattern is followed; and 3) determining that sludge is only disposed of at the dump site. A follow up evaluation of site reports will be completed at 3 months and again at 6 months to determine the necessity of the increased monitoring and

compliance with permit conditions.

4. Provide staff support, equipment, and training to effectively carry out the increased functions.

   The EQC will work with the MED to ensure that adequate staffing and equipment are available to complete the increased patrols, surveillance, and monitoring described above.

5. The EQC in conjunction the with the MED and the U.S. Coast Guard will completed a pamphlet which explains pollution and marine laws, penalties, and correct methods for disposal of vessel wastes. This will be translated through assistance of on island tuna vessel agents. Completion date for the pamphlet is 6 months from the start of the project. Distribution of the pamphlet will be provided by the MED, the Port Administration, and ship agents.

6. The EQC will review the outcome of increased monitoring after 3 months and provide recommendations to the MED on the feasibility and effectiveness of continuing the increased monitoring or whether additional monitoring is warranted.

PROJECT SCHEDULE

Task		Responsible Party	Time for Completion
1.	6 vehicle/foot patrols daily of vessels, canneries, and wharf	MED	3 months
2.	2 boat patrols daily	MED	3 months
3.	2 ocean dump site monitoring trips/week	MED	6 months
4.	Review effectiveness of increased monitoring and provide recommendations	EQC, MED	3 mos.,6 mos.
5.	Provide a report on fish processing waste disposal monitoring	EQC	6 months
6.	Project report to USEPA	EQC	12 months
7.	Complete multilingual pamphlet	EQC	6 months

Budget for Enhanced Marine Pollution Surveillance

1. Waterproof Binoculars (3 @ approx. $325 each) $1,000

   The MED presently does not have any marine binoculars. Part of the increased surveillance/monitoring will be observations of possible violations of marine pollution laws which necessitate the ability to monitor these violations from afar, unobserved by the violators. Without binoculars, it would be very difficult, if not impossible, to conduct such surveillance.

2. 35 mm Camera/Telephoto Lens/Case $1,500

   The MED does not have any camera equipment necessary to carryout the additional surveillance duties for this project. The camera and telephoto lens are necessary to document violations of marine pollution laws for use as evidence in substantiating the violations. As in the justification for the binoculars, it is necessary to document these violations from afar, without being observed by the violators. Without this equipment and photo documentation, it will be more difficult to prove that violations occurred.

3. Marine and VHF Radio equipment $3,500

   The MED presently has VHF equipment installed on its boat; however, it needs additional communication equipment for the Zodiacs (large inflatable rafts) which will be utilized for surveillance in Pago Pago Harbor. Additionally, walkie-talkies are needed for each individual officer, as some of the enhanced surveillance and monitoring will be done on foot, along the pier and on the ships. Presently, each officer does not have his own walkie-talkie. Immediate communications are needed for all MED staff in order to coordinate surveillance activities, communicate potential violations and need for additional back-up if necessary.

4. MED Staffing $6,000

   This funding will be utilized for additional MED staffing to support the increased monitoring efforts.

5. Printing Costs for Marine Pollution Pamphlets $1,000

   A. Development of 4-page pamphlet by ASEPA/MED on marine pollution laws and regulations, i.e.....explain generally which laws will be covered — No cost

   B. Translation costs (Samoan, Chinese, Korean) — $ 200

   C. Printing costs (500 pamphlets/language @ $200/set) — $ 800

EXHIBIT 2

NOVEMBER 25, 1991

Ace A. Tago
Director
Department of Treasury
American Samoa Government
Pago Pago, American Samoa 96799

Dear Mr. Tago:

Enclosed is a check for $6,000 to support the Supplemental Environmental Project, Enhanced Marine Pollution Surveillance. This check is to be deposited in American Samoa Government Treasury Account No. 180, Oil Spill Trust Fund as agreed to in the Memorandum of Understanding Between the U.S. Environmental Protection Agency and the Environmental Quality Commission concerning the Samoa Packing Co. and Star Kist Samoa, Inc. Supplemental Environmental Project.

Sincerely,

Michael Macready
General Manager
Samoa Packing Co.

cc: Chairman, EQC
Executive Secretary, EQC

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

July 22, 1991

Pati Faiai
Director
American Samoa Environmental
Protection Agency
Office of the Governor
Pago Pago, American Samoa 96799

Dear Pati:

Enclosed please find a copy of the administrative complaint for the assessment of civil penalties that EPA Region 9 has filed against VCS Samoa Packing Company, StarKist Samoa, Inc. and Pago Marine, Inc. The complaint alleges that the two canneries and its transporter have violated the Marine Protection, Research and Sanctuaries Act by failing to adhere to all conditions of their ocean disposal permits issued by EPA Region 9. Copies of the transmittal letters and 40 CFR Part 22 (Rules and Procedures) are also enclosed for your information.

As you discussed with Pat Young, the canneries and Pago Marine are invited to discuss the possibility of entering into a consent agreement settling this matter and your office has indicated interest in participating in these discussions. We will keep your office informed on any settlement discussion arrangements when we hear from the respondents.

Sincerely,

for Norman L. Lovelace
Chief, Office of Pacific Island and
Native American Programs

Enclosures

cc: Virginia Gibbons, AS Attorney General's Office
Chris Sproul, USEPA Region 9
Patrick Cotter, USEPA Region 9

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

22 JUL 1991

CERTIFIED MAIL P 057 506 635
RETURN RECEIPT REQUESTED

Maurice W. Callaghan
President and General Manager
StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

Dear Mr. Callaghan:

Enclosed is a copy of an administrative complaint for the assessment of civil penalties that EPA Region 9 has filed against StarKist Samoa, Inc. The complaint alleges that StarKist Samoa has violated the Marine Protection, Research and Sanctuaries Act by failing to adhere to all conditions of its ocean disposal permit issued by EPA Region 9.

We invite you to discuss the possibility of entering into a consent agreement settling this matter. You may contact the staff attorney assigned to the matter, Christopher Sproul (415) 744-1322 or staff project officer Pat Young (415) 744-1591 to arrange for settlement discussions.

Sincerely,

Harry Seraydarian
Division Director
Water Management Division

cc: Norman Wei, StarKist Seafood Company

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

22 JUL 1991

CERTIFIED MAIL P 057 506 637
RETURN RECEIPT REQUESTED

D.H. Silk
President
Pago Marine, Inc.
P.O. Box 4058
Pago Pago, American Samoa 96799

Dear Mr. Silk:

Enclosed is a copy of an administrative complaint for the assessment of civil penalties that EPA Region 9 has filed against Pago Marine, Inc. The complaint alleges that Pago Marine has violated the Marine Protection, Research and Sanctuaries Act by failing to adhere to all conditions of ocean disposal permits issued by EPA Region 9.

We invite you to discuss the possibility of entering into a consent agreement settling this matter. You may contact the staff attorney assigned to the matter, Christopher Sproul (415) 744-1322 or staff project officer Pat Young (415) 744-1591 to arrange for settlement discussions.

Sincerely,

Harry Seraydarian
Division Director
Water Management Division

Mike file

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

July 9, 1991

MEMORANDUM

SUBJECT: Fact Sheet on Ocean Disposal Enforcement Action for American Samoa Canneries

FROM: Pat Young Pat
American Samoa Program Manager (E-4)

TO: Chris Sproul
Attorney

As we discussed today, here is the pertinent information you requested to assist you in writing the administrative complaints for the American Samoa canneries' violations of their ocean disposal permits.

Permit Number: OD-90-01 Special

Permittee: (Maurice W. Callaghan
President and General Manager)
StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799
Phone: (684) 644-4231; Fax: (684) 644-2440

Applicant: StarKist Foods, Inc.
180 East Ocean Blvd.
Long Beach, CA 90802
(Our contact is Norman Wei, Manager, Environmental Engineering of StarKist Seafood Company)
Phone: (213) 590-3873; Fax: (213) 590-3882

Permit Number: OD 90-02 Special

Permittee: (Michael P. MacReady
General Manager)
VCS Samoa Packing Company, Inc.
P.O. Box 957
Pago Pago, American Samoa 96799
Phone: (684) 644-5536; Fax: (684) 644-2290

Applicant: (Fred. H. Avers

Enforcement Sensitive Material - Confidential

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

May 8, 1991

MEMORANDUM

SUBJECT: Meetings with American Samoa Cannery Representatives

FROM: Pat Young Pat
American Samoa Program Manager (E-4)

TO: Pat Cotter
Environmental Scientist (W-7-1)

Norm Lovelace and I, along with representatives from the American Samoa Environmental Protection Agency (ASEPA), had separate meetings with Samoa Packing and StarKist cannery representatives on April 30 while Norm and I were in American Samoa. Among other topics, we discussed the our review of the log maintained by the captain of the vessel which has been disposing of cannery high strength waste at the ocean disposal site.

I pointed out to the Samoa Packing representatives that your review of some of the logs showed possible improper dumping procedures and we needed clarification on what the captain of the ship meant when indicating wind and current direction (wind from the direction indicated; or wind to that direction; the same questions were raised for current direction). Proper dumping procedure is for the vessel to find the center of the dump site, ascertain wind and current direction and move 1.1 miles upcurrent and discharge in an oval pattern perpendicular to the current in order to utilize the maximum area of the dump site.

The Samoa Packing representatives had been previously alerted to this problem by Jim Cox and said they were supposed to meet with the former captain of the sludge boat but that he had missed his appointment. However, they did intend to talk to him in the near future. (He is Filipino and there may [redacted] be a language problem.) The present captain of the ship has reviewed the past logs and told Samoa Packing that it did appear to him that the wind and current directions indicated may have been mixed up in some of the logs. According to sailing protocol, direction for wind indicates direction from which the wind is blowing; direction for current indicates the direction the current is flowing toward.

cc: Mike Lee

The Samoa Packing representatives reassured us that the present boat captain has been made aware of the dumping protocol and is doing it properly. We indicated that you were writing a letter indicating your concerns and suggested they write a letter to USEPA reiterating what they had just told us.

Samoa Packing also informed us that they were looking into an emergency alternative vessel (barge pulled by a tug) for hauling high-strength waste and asked if USEPA had any concerns regarding this. I told them that you had expressed concerns to Norman Wei regarding the difficulty in safely hauling a barge to the ocean dump site, that it might be difficult for the barge to maneuver in the proper dumping pattern, and that we had to be assured that the dispersion of waste (discharge flow rate and beam width of the barge) would be adequate for the site. Again, we suggested they put their request in writing.

A similar conversation was held with StarKist representatives and they indicated that the new captain appeared more responsible and capable than the former captain. They also said that two cannery representatives had gone out with the new captain and it appeared that he was dumping properly.

Norm and I also met with Lua Moliga, the head of the newly-formed Marine Enforcement Unit, which is part of the local police department and is responsible for patrolling Pago Pago Harbor, enforcing marine and environmental regulations as well as search and rescue missions. We told him our concerns regarding ocean dumping of the canneries' waste. His unit, ASEPA and the US Coast Guard liaison officer will be having a training session in the near future which will include instruction on the ocean dumping permit requirements. His unit is willing to periodically monitor the dumping.

We also discussed with ASEPA the possibility of having the Coast Guard liaison officer go over the permit dumping protocol with the MV Astro's captain and actually go out with him on a few trips to insure that the all requirements are being met. ASEPA thought this was a good idea and that the Coast Guard would be amenable to this suggestion. However, the liaison officer was not on-island when we were there so we could not get confirmation at that time of whether this would actually take place. (Another problem is that he will be changing duty stations next month.) However, ASEPA will try to work with the various local agencies and its own staff to check on whether the ocean dumping permit requirements are being met.

cc: Pati Faiai/Sheila Wiegman (ASEPA)